MINDING THE GAP: AN EXAMINATIONS OF EDUCATORS' PERCEPTIONS ABOUT CYBER BULLING IN U.S. SCHOOLS

by

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Abstract

This research investigates the perceptions of cyber bullying among parents and educational professionals in U.S. schools. Initial research on the subject of cyber bullying revealed that anti-bullying laws in more than 20 U.S. states include terms that define cyber bullying. Collectively, these laws identify three domains of terms which identify: (a) devices that can be used to cyber bully, (b) possible individuals or groups that could be victims of cyber bullying; and, (c) possible motivations for acts of cyber bullying.

The Cyber Bullying Knowledge Survey (CBKS) was developed to determine if parents and educational professionals in U.S. school identify cyber bullying in similar ways to how it is legally defined; and, to determine if a disparity exists between how parents and educational professionals define cyber bullying and how it is legally defined. The survey was designed to measure the level of accuracy and degree of certainty with which study participants are able to identify the legally recognized terms that describe cyber bullying. Prior to distribution of the CBKS, the survey was administered to a panel of experts in cyber bullying and survey development and to a small group of individuals from the target population. The CBKS was validated by these two groups. Email distribution and Facebook were used as the primary recruitment tools for soliciting survey participation.

Data collected from the CBKS was tested using a Mixed Model ANOVA to determine if study participants were accurate in identifying those terms that legally define cyber bullying. Results of the testing revealed that a significant difference does exist between the way parents and educational professionals recognize cyber bullying when compared to ways in which it is recognized by law. Implications of these results for research and practice are discussed.

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Introduction

Anti-bullying legislation in the United States defines cyber bullying as an intentional, severe, and repeated electronic act which systematically and chronically inflicts distress on an individual or group of individuals. Educational researchers describe cyber bullying as a rapidly evolving, insidious, and opportunistic crime that is invading U.S. schools at an astounding pace. Cyber bullying is a significant problem in K12 education and is an emerging public health issue that needs to be addressed (Englander & Muldowney, 2010; David-Ferdon & Feldman Hertz, 2007; Kowalski & Limber, 2007). Current estimates suggest that 20 to 35 percent of school-aged children and adolescents experience cyber bullying at some point during their K12 experience (Hannah, 2010).

Cyber bullying is a relatively new behavioral phenomenon which lacks a clear, concise definition. According to Wolak, Mitchell, and Finklehor (2007), parents and educational professionals perceive cyber bullying in a variety of ways, based on their individual experiences with the phenomenon. A need exists to define cyber bullying, based on societal factors that have changed the ways in which children and adolescents in K12 learning environments are communicating with one another, and with the world at large. Parents and educational professionals need a multifaceted definition of this type of bullying in order to accurately recognize and assess the negative impact of cyber bullying (Glasner, 2010; Worthen, 2007). This study proposes the exploration of current perceptions of parents and educational professionals about cyber bullying, in an attempt to develop a process through which cyber bullying can be operationally defined at any level of K12 education.

The New Face of Bullying

In the last ten years, the concept of bullying has undergone significant transformation. What was once considered a simple act of physical aggression has transformed into three distinct sub-groups of aggression-based behaviors: (a) physical bullying, (b) relational or social bullying, and (c) cyber bullying. Traditionally, bullying has been identified as an act of physical aggression where an imbalance of power existed between the aggressor (bully) and the victim (Olweus, 1994). Physical bullying is characterized by a single (or multiple) event(s) that require an audience, and is intentionally violent or hurtful. This pattern can be repeated over time, but still requires a public setting in order to be recognized as physical bullying (Naylor, Cowie, Cossin, de Bettencourt, & Lemme, 2006). Relational/social bullying is characterized by both overt and covert acts of excluding individuals socially, spreading rumors about individuals, or groups, or hurting others by damaging their reputation or their relationships (Esplage, Mebane, & Swearer, 2004). Shariff and Gouin (2005) theorize that cyber bullying "…consists of covert, psychological bullying, conveyed through electronic mediums…" (p. 3).

Cyber bullying is unique because it is dependent on advanced technologies. It has also been referred to as "cruelty by computer," "online social cruelty," and, "electronic bullying" (David-Ferdon & Feldman Hertz, 2007; Williams & Guerra, 2007). Broadly defined, this phenomenon refers to a pattern of behaviors that: can happen at any time, on any type of communication technology (Kowalski & Limber, 2007); can create an unwarranted/ imbalanced virtual connection between the victim and the bully (Vanderbosch & Van Cleemput, 2008); and offers no means of "escape" or resolution for the victim. (Junoven & Gross, 2008; Wolak, Mitchell, & Finkelhor, 2007)

Aggression and antisocial behavior in American schools are persistent and very visible problems. Researchers believe there is a growing awareness of the detrimental consequences of

being bullied on a child's well-being (Pellegrini & Long, 2004; Williams & Guerra, 2007). Cole, Cornell, and Shears (2006) agree that bullying is a pervasive, systemic problem in public K12 schools in the United States. Bullies and their victims are sometimes marginalized because many parents and educational professionals do not believe that bullying is a serious problem in their school. Principals believe their schools are safe places to learn, where little or no bullying occurs, and teachers believe it to be the principal's responsibility to deal with issues like bullying (Harris & Hathorn, 2006). With these kinds of assumptions deeply embedded in school culture, bullying behaviors tend to be dismissed as simple horse play, "boys being boys," or times children and adolescents need to learn how to deal aggression on their own with limited adult interference.

As the Internet, the World Wide Web, and portable digital technologies become progressively more popular with children and adolescents, increased scrutiny must be placed on exploring the potential harm of these advanced technologies on the health and well-being of children and adolescents (Ybarra, Diener-West, & Leaf, 2007). The problem facing parents and educational professionals include issues such as: (a) cyber bullying is harmful to the social/emotional development of children and adolescents, (b) this behavior is not specifically defined, and (c) a lack of definition causes confusion among parents and educational professionals as to how to recognize, identify, and battle this problem. Solutions to the problem include efforts to identify the terms, actions, and technology that define cyber bullying so that educators can be familiar with cyber bullying and intervene to protect children and adolescents.

According to research published in a 2008 special edition of the journal *Action in Teacher Education,* 85% of classroom teachers are unprepared and misinformed about situations that might result in "legal predicaments" because of a pervasive legal fear among teachers

(Arum, 2008). As of January 2014, more than 20 U.S. state legislative bodies have passed state anti-bullying laws that identify three groups of descriptors which legally define cyber bullying behavior: (a) how cyber bullying happens, (b) who it happens to, and, (c) why it happens. Even in the face of an apparent legal definition, parents and educational professionals have no common definition of this behavior to assist in recognizing, mitigating, or preventing cyber bullying.

An operational definition of cyber bullying, derived from existing state legislation, would enhance legal awareness/literacy among parents and educational professionals about cyber bullying. Crucial to this enhanced awareness would be improved knowledge about what constitutes an act of cyber bullying and how it can be prevented. An operational definition of cyber bullying is essential in apprising education stakeholders and policy makers of the destructive impact this behavior has on the social and emotional development of children and adolescents. A universally accepted definition of cyber bullying is needed to ensure anti-cyber bullying policies developed at all levels of education (local, state, and national) align with existing state statutes.

Problem Statement

The central problem to be addressed in this research is the lack of a definition for cyber bullying (Wolak, Mitchell, & Finklehor, 2007). Most research into the phenomenon has explored the perceived knowledge and perceptions of children and adolescents about cyber bullying (FightCrime.org, 2006; Juvonen & Gross, 2008; Lenhardt, 2007). However, few studies have been conducted that posed similar questions to parents and educational professionals. The scarcity of research which identifies what types of behaviors constitute acts of cyber bullying suggests that researchers have been unable to achieve consensus of a definition, or set of defining

characteristics that help to identify this rapidly evolving behavior. A new media landscape, advanced forms of communication, and a relatively ungoverned virtual society now require that parents and educational professionals find a clear-cut way of defining bullying in its virtual form. The absence of a definition of cyber bullying limits the effectiveness of parents and educational professionals to protect students and impedes their ability to assess or intervene in possible cyber bullying incidents.

Significance of the Study

"How, how often, and under what circumstances is technology being used by young people to perpetuate aggression (David-Ferdon & Feldman Hertz, 2007 p. 2)?" Few scientifically-based research studies exist that ask educators to identify, recognize or define cyber bullying. How should educators define this destructive behavior? Wolak, Mitchell, and Finkelhor (2007) believe researchers have yet to create an "operational" definition of cyber bullying. Advanced technologies and the unique dynamics of a new "technology-dependent," information-driven society, require the development of a multidimensional definition of cyber bullying, separate and distinct from bullying.

Taking into consideration the amount of time teachers, principals, school psychologists, and other educators interact with children and adolescents in the K12 learning environment, parents and educational professionals need to be cognizant of the cyber bullying phenomena, be able to recognize incidents of cyber bullying, understand how cyber bullying can and will happen, and be able to identify potential victims (Englander & Muldowney, 2007; Glasner, 2010; Worthen, 2007). More specifically, parents and educational professionals need to understand that bullying has transgressed into an act that can be accomplished anonymously and can be

more detrimental than the physical affects/scars left behind by physical bullying (Glasner, 2010; Wang, Iannotti, & Nansel, 2008).

The purpose of this study is to gather data about parents' and educational professionals' perceptions of cyber bullying and determine if these individuals perceive of or define cyber bullying in similar ways. Any common descriptive terms identified in this analysis may be interpreted as the basis for an operational definition of cyber bullying. Given the continued popularity of advanced digital media and digital communications among children and adolescents, it is essential that all parents and educational professionals are able identify, recognize, and assess this dangerous form of electronic aggression.

Research Questions

From a dearth of research that questions the perceptions and knowledge of educational professionals and parents about cyber bullying, two questions arise:

1. How do parents and educational professionals characterize cyber bullying?
2. How accurate are parents and educational professionals when identifying the devices, victims, and motivations of cyber bullying in terms of legal definitions of these terms?

The purpose of this research was to answer these questions. A mixed method, quantitative approach was applied to the collected data to test the following research hypotheses:

1. Personal characteristics influence levels of accuracy/certainty when identifying legally recognized and unrecognized devices used for cyber bullying.
    a. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized devices used to cyber bully, based on the participants' role in education.

b. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized devices used to cyber bully, based on the participants' age.

c. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized devices used to cyber bully, based on the participants' number of years in service

2. Personal characteristics influence levels of accuracy/certainty when identifying legally recognized and unrecognized victims of cyber bullying.

   a. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized victims of cyber bullying, based on the participants' role in education.

   b. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized victims of cyber bullying, based on the participants' age.

   c. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized victims of cyber bullying, based on the participants' number of years in service.

3. Personal characteristics influence levels of accuracy/certainty when identifying legally recognized and unrecognized motivations for cyber bullying.

   a. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized motivations for cyber bullying, based on the participants' role in education.

b. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized motivations for cyber bullying, based on the participants' age.

c. There will be a significant difference in levels of accuracy/certainty when identifying legally recognized and unrecognized motivations for cyber bullying, based on the participants' number of years in service.

Summary

No studies have been located that ask educators to specifically identify or define cyber bullying, based on a predefined set of terms. In order to prevent cyber bullying, those who interact with children and adolescents must first know how to recognize it. Teachers can only intervene effectively if they understand the nature of the problem (Hannah, 2010; Glasner, 2010). It is important that parents and educational professionals understand three important points about cyber bullying: (a) the role of technology in the social development of children and adolescents is not going away, (b) both bullying and cyber bullying happen under different conditions and in different ways, and (c) professional development activities that include information about cyber bullying are as important as training educational professionals on the need for Internet safety (Glasner, 2010; Englander & Muldowney, 2007). School administrators should also understand this new frontier of bullying and be willing to provide the requisite training to teachers to help educators to understand and intervene.

REVIEW OF RELATED LITERATURE

A Brief History of Bullying

As early as 1993, seminal research on bullying was published by Dan Olweus, the foremost expert on bullying in schools. Olweus' research on bullying began with an examination of the bully/victim problems among elementary and junior high school students in Scandinavia. His 1994 research was a synthesis of four studies: a longitudinal project in which approximately 900 Swedish boys were studied and three large-scale studies conducted in Norwegian elementary and secondary/junior high schools. Some of the issues addressed in Olweus' original research include the definition and prevalence of bullying, typical characteristics and behaviors exhibited by bullies; and, the development of "aggression reaction patterns" among bullying victims and bystanders.

Bullying is deliberate, systematic and proactive aggression against an individual, which continues over an extended period of time (Espelage & Asidao, 2001; Pellegrini, 2001; Olweus, 1994; Swearer & Doll, 2001). These repeated, open acts of aggression are usually self-initiated by the bully and are done with deliberate intention to hurt others, where the aggression is largely unprovoked (Espelage & Asidao, 2001; Swearer & Doll, 2001). Bullying behaviors can include a variety of hurtful actions including physical attacks, name calling, social exclusion, personal property damage and stealing of personal property, extortion, spreading nasty rumors, and verbal threats (Espelage & Asidao, 2001). These are behaviors used to achieve and maintain social dominance through overt and covert aggression means (Arora, 1987).

Researchers speculate that bullying is a harmful behavior that falls within the domains of behavior with moral consequences and should be defined as a constellation of behavioral interactions (Swearer & Doll, 2001; Williams & Guerra, 2007). This behavior is also considered

a construct that should be viewed on a continuum, ranging between the actions of the bully and the effect these acts have on the victim (Olweus, 1994; Swearer, 2001). Esplage and Holt (2001) and Vaillancourt, McDougall, Hymel, Krygsman, Miller, Stiver, and Davis (2008) conceptualized bullying as a unique subcategory of aggression. Bullies create personal opportunities to express dominance and reap secondary social and interpersonal gains and can be influenced by common social influences such as age, race, and socio-economic status (Gottheil & Dubrow, 2001; Williams & Guerra, 2007).

From Olweus' initial conceptualization of bullying, two distinct sets of behaviors emerge: physical intimidation or indirect/ relational aggression. Bullying is defined by three key characteristics: intentionality, repetition, and, a complete imbalance of power between bully and victim (Englander, 2010; Vaillancourt, et al., 2008). Bullying behaviors include acts of domination and control expressed by one individual over another. These behaviors can be characterized by an unequal distribution of psychological or physical power among participants (Gotheil & Dubrow, 2001; Olweus, 1994; Pellegrini, 2001; Swearer, 2001).

According to researchers, Jeffrey, Miller and Linn (2001), bullying has traditionally been understood as a "normative social experience of childhood endured by many but damaging only to a small populations of individuals…" and that bullying is "ultimately a benign part of school, but still unpleasant and inescapable for the victim" (p. 144). National and international evidence suggests that present day bullying occurs more frequently, and with great lethality, than it did in the 1970s and 1980s (Swearer & Doll, 2001). It has been suggested that bullying is most often associated with catastrophic violence and there is a tendency for adults to only focus on those incidents that end tragically for the victim (Englander and Muldowney, 2007; Englander, 2012).

In adolescence, bullying is associated social dominance and often motivated by issues associated with peer status and heterosexual relationships (Pellegrini, 2001). Jeffrey, Miller and Linn (2001) assert that the act of bullying creates an environment where a hierarchy of domination is maintained through perceived force. For example, Harris and Hathorn (2006) discovered that students in middle school "perceive that denigrating others" is the quickest way to popularity and adolescent males typically admire aggressive and violent behaviors. In general terms, physical bullying is more common among adolescent males, while relational/social bullying is more predominate in the social activities of adolescent females. Bullies are characterized as being stronger, bigger, aggressive, impulsive, uncooperative, and low in empathy. Victims are less physically strong, timid, introverted, have low self-esteem, and few friends (Harris & Petrie, 2002).

Relational aggression has newly emerged as a subset of bullying behaviors where the goal is to hurt other individuals by damaging their personal reputation or their relationships. This form of social (relational) aggression includes behaviors intended to cause harm to another person's self-esteem, reputation, or social status as a strategy to gain social status among peers (Pellegrini and Long, 2004). Relational aggression can also be viewed as verbal aggression, a more indirect form of bullying common among adolescent girls (Espelage, Meban, & Swearer, 2004; Harris & Hathorn, 2006; Pellegrini, 2001; Vaillancourt, et al., 2008). Social manipulation is another form of relational aggression that includes such behaviors as: attacking individuals in circuitous or covert ways; spreading rumors; malicious gossiping; intentional social isolation; withdrawing friendship or acceptance to a peer group; or, group ostracism (Espelage, Meban & Swearer, 2004; Gottheil & Dubrow, 2001; Swearer, et al., 2001; Pellegrini, 2001; Vaillancourt, et al., 2008). In summary, the motivation for relational/social aggression is the intent to

significantly damage another child's friendship and social standing within a peer group (Espelage, Meban, & Swearer, 2004).

Bullying Studies

According to Olweus, bullies are four times more likely to be involved with criminal behavior. Forty percent of bullies have three or more convictions by the age of 24 (Harris & Petrie, p. 45). Extant research has shown that teachers and students have different perceptions of bullying and the factors contributing to bullying (Pellegrini, 2001). Olweus noted in his 1993 research that teachers, especially in secondary schools, tend to underestimate its occurrence and do little to discourage it. Pellegrini and Bartini found in their research (2000) that middle school teachers did not see bullying as a problem. A study conducted by the Massachusetts Aggression Center in 2006 showed that teachers had difficulty recognizing bullying (Englander, 2006).

Olweus' 1991 survey of students suggests that as many as 80% of middle school students engaged in bullying behavior (as bully, victim, or bystander). The National School Board Association's Council of Urban Boards of Education (NSBA CUBE) conducted a school climate study in 2007. The results of this study indicated that out of 32,000 high school students in 15 urban high schools, 50% reported they witnessed bullying behaviors at least once a month. This finding is supported by Harris and Petrie (2002) who reported that 92% of the middle school students surveyed witnessed bullying behaviors "sometimes." In this study, middle school students reported that bullying experiences included: (a) being called names (49.5%), (b) being teased (46.5%), (c) being left out (34%), (d) being physically hurt (22%), or (e) being threatened (20%). Harris and Petrie also reported that incidents of bullying happened most often: (a) at lunch (83%), (b) in the classroom (77%), (c) on the way home from school (62%), and (d) on the way to school (34%).

Survey participants in the Harris and Petrie (2006) study also indicated that they believed that 60% of teachers and 73% of administrators either were "not interested" or did not know if [teachers or administrators] were interested in dealing with bullying in their schools. Only 2.5% of participants responded said they would "tell a teacher" about bullying incidents. Seventeen percent of study participants contemplated staying home from school to avoid bullying, 4% responded that they had stayed home at least once or twice for fear of being bullied. Results from the NSBA CUBE school climate survey (2007) revealed that nearly half of those who responded "expressed doubt" that their teachers could really do anything to stop the bullying behaviors they witnessed (Hutton, 2006).

Leff, Kuperschmidt, Patterson, and Power (1999) conducted a study to examine the factors that influenced teacher identification of bullies and victims. Teachers who participated in this study were asked to identify those students they thought were bullies and those they thought were victims, from a "student derived" list of peer-reported bullies. When the results from this study were examined for the success rate of middle school teachers in identifying bullies and their victims, teachers were only able to correctly identify 22% of the middle school bullies and 16% of the middle school victims from the peer-reported lists. Middle school teachers were very successful in identifying those students who are labeled "bystanders" (neither bully nor victim) at a positive identification rate of 91%.

Leff, et al. (1999) believe this poor result for middle school teachers in identifying the bullies and the victims may be due in part to the fact that these teachers do not see the same group of students all day, and that bullying behaviors in middle school are more covert. Elementary school students tend to be more physical in their bullying behaviors, but middle school students rely more on relational aggression as their main form of bullying, especially

girls. The authors of this study also believe that bullying happens in many places were teachers are not present (at the bus stop, in the locker room, etc.), so the practice of positively identifying bullies is not as much of a part of a teacher's daily routine as it probably should be.

A study conducted in 2006 by Harris and Hathorn examined the perceptions of middle school principals about bullying in their schools. The study found that principals' awareness of bullying differed from that of students. In general, principals believed their school was safe and that their faculty was supportive of students. In contrast, students in these same schools did not believe their school was safe and did not believe the principal or the teachers were willing or able to stop bullying behaviors when they saw them happening (p. 64). Pellegrini and Bartini (2000) found in their own research that middle school teachers did not see bullying as a problem.

Mental, Social and Emotional Effects of Bullying

"We no longer have the luxury of ignoring what has become an ugly part of our common culture and a painful part of growing up for most American children" (Sanchez, 2001, p. 158). Like aggression, bullying is a core issue in the development and behavior of American kids Since the tragic events at Columbine High School in April 1999, researchers have focused some of their attentions to studying the relative impact of chronic emotional and psychological violence on American children and adolescents (Esplage & Swearer, 2004). Bullying and the chronic victimization of children and adolescents in today's schools remain a significant problem with longstanding clinical implications (Gottheil & Dubrow, 2001). Jeffrey, Miller and Lynn (2004) assert that "bullying is a formative social experience with long-term developmental implications" (p. 145).

Children and adolescents who are victimized by bullying are: (a) more likely to be depressed, (b) develop low-self-esteem; (c) experience a continuing loss of confidence; (d) suffer

peer rejection; (e) exhibit extensive school absenteeism; (d) are consistently anxious; and in the most severe cases – (e) attempt suicide. Bully victims can also feel chronically unsafe at school, and victims reported significant distress from low-level aggression, such as teasing (Esplage & Holt, 2001; Gottheil & Dubrow, 2001). According to Mason (2008), more than 16,000 students miss school every day due to fear of bullies. Hoover and Oliver reported in 1996 that 14 percent of eight to 12th grade students surveyed reported that bullying impeded their ability to learn in school.

Problems with Defining Bullying

To paraphrase researcher and clinician Suzanne Srgoi, "you can't diagnose something if you don't believe it exists" (Espelage & Swearer, 2004). As early as 2001, Espelage and Asidao asserted that very little empirical research had been conducted about bullying because educational researchers had not achieved any real consensus on how to define bullying behavior. Jeffrey, Miller and Lynn (2001) declare that the lack of a definition is a "silent nightmare," asserting that a code of silence exists around reporting incidences due to differing perceptions about what constitutes bullying. These researchers further assert that parents and educational professionals have no idea what to report and what can be dismissed as harmless. Equally important to the process of defining bullying is that clinical observers of behaviors are not always able to discriminate between "pretend conflicts" ostensibly between friends and "authentically coercive behaviors." Not all bullying is observable and unless the observed bullying episode aligns with an educational practitioner's individual definition of bullying, that individual may not include the observed episode in their estimation of bullying frequency (Holt & Keyes, 2004; Swearer & Doll, 2001).

Vaillancourt, et al., (2008) believe the task of defining bullying and all its intrinsic motivations, modalities, and potential victims is virtually impossible, especially since educational researcher do not define bullying in ways that are similar to how children and adolescents define the same phenomenon. Establishing a clear definition of bullying, including information about its various forms, is critical for the discovery of accurate and comparable estimates of its prevalence. The establishment of a clear definition of this phenomenon is necessary for validating any future scientifically-based research on bullying. Swearer and Doll (2001) believe that the absence of a definition of bullying has led to the creation of an abundance of anti-bullying programs that lack any scientific research to prove their efficacy. The lack of a precise definition of bullying ensures the increased difficultly for parents and educational professionals to agree how to intervene and how to prevent this type of behavioral problem in 21st century K12 schools (Stein, 2001; Vaillancourt, et al., 2008).

Pellegrini states that given the divergent perspectives on what constitutes bullying, further research should incorporate a "multi-informant, multi-method research strategy where "bullying constructs" are defined by different groups of individuals" (Pellegrini, 2001). Bullying should be defined by different points of view….student self –report mechanisms; school personnel through teacher checklists (Pellegrini, 2001). Researchers need to clearly spell out criteria and assumptions about what is being measured when gathering data about bullying (Vaillancourt, et al., 2008). This same concept should apply to research into the phenomenon of cyber bullying. Given that identifying both bullying and cyber bullying is dependent on individual personal experiences, the challenge in collecting accurate data about perceptions becomes especially difficult.

Introduction to Cyber bullying

Technology has removed the schoolyard parameters from traditional bullying and expanded the problem to a borderless cyber world (Diamanduros, Downs, & Jenkins, 2008). In his study, Mason (2008) asserts that prior to twenty-first century technology advancements, individuals who bullied others required a physical location to harass their victims. With the development of the Internet and the World Wide Web, anonymous harassment can now occur with little to no supervision (of any kind) and almost always without consequences. Juvonen & Gross (2008) believe that the revolutionary increases in the use of the Internet by adolescents and a lack of adult online supervision provides a fertile ground for bullying.

The Role of Technology in Cyber bullying

Cyber bullying is a form of intimidation/aggression, which is typically augmented by: (a) humiliation, (b) destructive messages, (c) gossip, (d) slander, and, (e) other virtual taunts that are propagated through email, instant messaging, chat rooms, and, blogs (Williams & Guerra, 2007). With the advent of advanced digital media technologies, new outlets of social interaction have been created. However, these new outlets also provide a new conduit for bullies to victimize. In many cases, victims of cyber bullying may not have been previously considered as potential targets, but the notion of "inseparability" of a cell phone from its owner makes anyone susceptible to electronic attacks (Englander & Muldowney, 2007; Englander, 2010; David-Ferdon & Feldman Hertz, 2007; Li, 2008; Mason, 2007). Young people are using new media technology at record rates and the increased frequency of being virtually connected has amplified the ability for bullies to concentrate their attacks in an environment associated with anonymity, nonexistent supervision, minimal repercussions, and a nearly unlimited audience. According to Mason (2008), the Internet has denigrated the quality of human interaction and has opened up a virtual arena where destructive emotional impulses are rarely controlled.

Juvonen and Gross (2008) believe that recent public concerns over incidents of cyber bullying have focused more on the risks associated with this destructive behavior. Less attention has focused on a bully's ability to use technology as a means of quickly and anonymously spreading messages to a potentially unlimited audience (Englander & Muldowney, 2007). Increased access to the text messaging, micro blogging sites (Twitter, etc.) and social media sites (FaceBook, MySpace, etc.) makes it easier for bullying to happen and much more difficult to stop (David-Ferdon & Feldman Hertz, 2007; Li, 2008). Englander and Muldowney (2007) assert that adults are seemingly unaware of what types of cyber bullying exist, the risks associated with it, and how children and adolescents can bypass the safeguards that have been put in place to protect them for this highly destructive behavior.

According to Diamanduros, Downs, and Jenkins (2008), cyber bullying can be inflicted on its victims in many different ways. Today's youth consider technology to be a natural component of their society. They are very sophisticated and technology-savvy users, who can deliver threats, send unflattering or incriminating photographs, harass, tease, belittle or snub fellow classmates with the click of a button. Cyber bullying can be distributed quickly, and anonymously, to a wide audience with little to no repercussions or reprisals (Diamanduros, Downs, & Jenkins, 2008; Wolak, Mitchell & Finkelhor, 2007). Advanced digital and electronic media devices that allow users to stay constantly connected, without supervision, can lead to high risk behaviors, especially among adolescents. Cyber space epitomizes the perception of an environment where anonymity and facelessness are virtually guaranteed. The byproduct of an assumed anonymity eradicates the adolescent concern of detection, social disapproval and punishment (Mason, 2008; Willard, 2005; Williams & Guerra, 2007).

Mental, Social and Emotional Effects of Cyber bullying

The role of advanced technologies and their negative effects on the development of adolescent health is a relatively new field of study (David-Ferdon & Feldman Hertz, 2007). Diamanduros, Downs, and Jenkins (2008) assert that much like traditional bullying, cyber bullying has "negative psychological and emotional effects on its victims, including anger, frustration and depression." The constant pressure of these negative interactions can render an adolescent socially vulnerable and can lead to the manifestation of deviant or violent coping behaviors.

The ubiquity allows children and adolescents to use cyberspace for the purpose of identity experimentation. This type of experimentation with identity in a relatively anonymous environment, with limited supervision, can expose individuals to the possibility of cyber victimization, including cyber bullying (Wang, Ionatti, & Nansel, 2009). Some of the numerous emotional effects suffered by those who are victims of cyber bullying include low self-esteem, poor academic performance, depression, general emotional distress, eating disorders, chronic illness, violence, and, in some cases, suicide (Mason, 2008).

Victims of cyber bullying can suffer heightened forms of estrangement or isolation because the victim is not likely to discuss the issue of victimization with an adult, for fear of losing access to cell phones and computers (Juvonen & Gross, 2008). Ybarra, Diener-West and Leaf found in their 2007 study on the overlap of school bullying and cyber bullying, that approximately one-third of cyber bullying victims were threatened or embarrassed because private, personal and/or confidential information about them had been sent out to others via advanced technologies or had been posted, without their knowledge or permission, on the Internet. Unfettered access to advanced communications technologies and the Internet creates multiple scenarios for repeated victimization of a target. When harassment is posted online, it is

nearly impossible for the victim to terminate the situation or the ongoing abuse or harassment (Wolak, Mitchell & Finkelhor, 2007). Unlike traditional bullying, cyber bullying can occur at any time. Cyber bullying can and does go unnoticed for long periods of time and typically offers no escape or reprieve from the torment of constant aggression (Juvonen & Gross, 2008; Mason, 2008).

Differences between Bullying and Cyber bullying

Olweus (1993) defines bullying as aggressive behavior, repeated over time, which is intentionally harmful and occurs with no provocation. Individuals who are motivated to bully usually exhibit specific behaviors where the bully enjoys dominating the victim and the victim feels oppressed (Harris & Petrie, 2002). A key feature of bullying is an element of publicity. Acts of bullying routinely occur in the presence of other students (Jeffrey, Miller & Linn, 2001). In the case of physical bullying, the bully has complete control of the environment where the attacks(s) occur because although physical bullying can occur over a long period of time, each attack has a beginning, middle and an end. Once a single attack is over, that act of physical bullying is complete, even if that act is repeated over time at regular intervals.

Uniquely different from physical bullying, the motivations for cyber bullying are to disrupt and/or destroy the reputation of another individual or group of individuals. This can be accomplished in two ways: (a) destruction which usually manifests as an act of anger and is characterized by a short-term, single event, or (b) disruption which usually manifests itself as an act of perpetual anger that seeks out to ruin the reputation of the target, through repeated attacks over a long period of time. Another distinctive feature of cyber bullying is that unlike physical bullying, a victim of cyber bully has little to no control over the event, once it is released into cyber space. The ability for the event to propagate and spread is driven by the technology upon

which the act is created and is nearly impossible to stop. An order to cease and desist is not an option available to cyber bullying victims.

Problems Recognizing and Defining Cyber bullying

In the world of teaching and learning, advanced technologies are considered a gateway to vast amounts of information (Li, 2007). Cyberspace has a tremendous promise for creating a connected world (Englander & Muldowney, 2007; Mason, 2008). Although many teachers and administrators recognize the problems associated with school bullying, few are aware that students are being harassed through electronic communications (Li, 2007). Keith and Martin (2005) believe that part of the problem in recognizing and defining cyber bullying is that children and adolescents relate to technology in very different ways when compared to the attitudes of older generations. The relationship forged by children and adolescents with technology is a virtual lifeline to access their peer groups and the outside world. Adults are more cautious, and view technology as practical tools that generally make life easier. This difference in views about the role of technology in society leads to a disparity in the "conceptualization and measurement" of what society broadly refers to as electronic aggression (David-Ferdon & Feldman Hertz, 2007). Additionally, the problem with defining cyber bullying is that a plethora of terms are associated with this phenomenon including electronic bullying, cyber bullying, internet bullying, internet harassment, social aggression, electronic aggression, and online harassment. While all of these terms are applicable when defining cyber bulling, each terms holds a different meaning to the individual educational practitioner responsible for recognizing, identifying and preventing this new form of "high tech cruelty" (Hinduja & Patchin, 2011).

Cyber bullying Studies

As early as 1999, the Crimes against Children Research Center, at the University of New Hampshire, began collecting data to identify and quantify incidents of bullying among school aged children and adolescents, which occurred in online environments. Research studies and popular opinion polls conducted during a three year period explored the recognition and knowledge level of adolescents in regards to cyber bullying and cyber threats (FightCrime.org, 2006; Juvonen & Gross, 2008; Pew Internet/Lenhardt, 2007). According to the results reported in these studies, cyber bullies and virtual bystanders do not consider their actions to be aggressive, demoralizing or malicious. Cyber bullies don't think they are bullying, they are having fun! A 2007 study conducted by the Massachusetts Aggression Reduction Center, indicated that most cyber bullies attributed their actions to "anger" (65%) and "a joke" (35%). Bystanders who see it happen don't recognize it as a destructive behavior, and cyber bullies believe what they are doing is "fun" and do it "just because I can." Children and adolescents view electronic aggression as a harmless act, where no damage is done to the victim.

In Glasner's (2007) research, educators were asked to complete a survey about their knowledge of cyber bullying and their perceptions about the nature and scope of cyber bullying in their school. Participants were also asked to disclose their ability to identify student responses to cyber bullying. Questions included on this research instrument also queried parents and educational professionals' recognition of bullying technology. Ninety-one percent of survey respondents indicated that they were aware of the cyber bullying phenomenon and its social and emotional effects. Survey results also indicated that survey participants understood the negative effect of cyber bullying. Over ninety-five percent of the participants understood that cyber bullying is "traumatic" and that it can have a deleterious effect on peer relationships and the learning environment.

Glasner's (2007) revealed that parents and educational professionals polled in in her study were not familiar with the culture of cyber bullying, including such things as the frequency with which cyber bullying occurs, the extent of cyber bullying in their school and the types of technologies used to cyber bully others. According to Naylor, Cowie, Cossen, de Bettancourt and Lemme (2006) this unfortunate lack of familiarity can be attributed to teachers' deficient perceptions of the nature and extent of the phenomenon.

Most other research on cyber bullying is derived primarily from anecdotal accounts and a limited number of youth-centered surveys. The findings derived from the youth-centered surveys suggested that cyber bullying rates among youths range between 20 and 35 percent with the average being around 25 percent (Hannah, 2010; Williams & Guerra, 2007). Research estimates that adolescents self-reports of experiencing at least one incidence of cyber bullying within a school year can range from nine to 49 percent (Juvonen & Gross, 2008). They also report that approximately one-fifth of child and adolescent Internet users (12 to 17 year olds) have been bullied within the past year, and that an increased use of advanced technologies equates to increased odds of being cyber bullied. Research on cyber bullying conducted by Margaret Hannah at the Massachusetts Aggression Reduction Center (MARC) in 2010 estimated that 20 to 35 percent of children and adolescents have experienced some form of cyber bullying during their K12 experience. Most abundant are the studies that focus on how much time children and adolescents use advanced technologies (i.e., cell phones, instant messaging, social networking sites). Studies that examine how children and adolescents use technology only serve to confirm the wired culture in which adolescents operate (Juvonen & Gross, 2007; Kowalski & Limber, 2007).

Gaps in the Literature

Cyber bullying represents a significant and ongoing public health/mental health issue that needs to be researched extensively (Kowalski & Limber, 2007; Ybarra, Diener-West & Leaf, 2007). David-Ferdon and Feldman Hertz (2007) question whether cyber bullying is a public health problem that is in need of focused prevention and intervention efforts. Ybarra, Diener-West and Leaf (2007) assert that as technologies advance and become more popular with children and adolescents, both the benefits and the risks of these technologies on adolescent mental and physical development are being recognized by researchers. David-Ferdon and Feldman Hertz (2007) suggest that future research needs to be conducted in the area of cyber bullying and other forms of electronic aggression, given the increase in incidences of cyber bullying, the negative impact of this phenomenon on adolescent health and the association of electronic aggression with problems in school settings.

Diamanduros, Downs, and Jenkins (2008) assert that cyber bullying is a new phenomenon that presents challenges for school personnel. As educators embrace the virtual options that open doors to new knowledge, it is important to address the range of negative issues that permeate the use of technology in the teaching and learning environment. With multiple terms being applied to characterize and define cyber bullying; and, the lack of a standardized operational definition, parents and educational professionals are finding it increasingly difficult to address this new at-risk behavior, as well as pool resources and draw conclusions about what constitutes this phenomenon. This problem is further compounded by the lack of a standard metric to measure electronic aggression (David-Ferdon & Feldman Hertz, 2007). Forging a path to understanding as to how parents and educational professionals perceive cyber bullying is the best way in which to inform, develop and implement any intervention programs addressing this phenomenon and electronic aggression as a whole (Wothen, 2007).

According to Stein, educational settings have adopted a "climate of permission for illegal conduct" (Stein, 2001, p. 2). Stein's statement might be considered harsh; however, it does highlight a common problem in education – the lack of a standardized definition of disruptive behaviors that should be considered by all parents and educational professionals as egregious offenses. In the case of this research project, there is only one way for that to happen: an examination of educator's perceptions of cyber bullying, in an attempt to determine if operationalizing a definition of this term is possible.

Summary

According to rulings made by the United States Supreme Court, public schools have the legal right to curtail student activity, when that activity has a significant effect on the learning environment, or violates the civil rights of other individuals (Bethel v. Fraser, 1986; Hazelwood School District v. Kuhlmeier, 1988; Tinker v. Des Moines, 1969). Diamanduros, Downs, and Jenkins (2008) posit that in a natural extension of these rulings, schools have the legal right "to intervene in incidences of cyber bullying, including those initiated off campus, if there is evidence that the incident resulted in a substantial disruption of the school environment. Kowalski and Limber (2007) believe more detailed research is needed to explore the venues through which cyber bullying occurs (i.e., social networking sites, sms texting sites, etc.) to determine the content of these episodes; the context in which they take place; and the frequency with which they occur.

According to Wolack, Mitchell and Finkelhor (2007), researchers and clinicians have not devised standard definitions of online harassment (including cyber bullying) and the few research instruments that do exist to measure and quantify the phenomenon have all been designed using different definitions and different contexts, using radically different participants

groups. These disparities in the instrument and its application would lead to "widely varying rates of occurrence" (p. 51). Worthen (2007) stresses that all education practitioners, including student services personnel, should commit to agreeing on a common set of definitions for cyber bullying, as well as a common instrument with which to identify and measure incidences of cyber bullying. Worthen further asserts that more investigation and research needs to occur to create or locate an "innovative and reliable form of survey methodology" (2007, p. 63) that will also stand up to the scientific rigor applied to an existing tool which predicts or identifies a specifically diagnosed behavior issue or problem. In addition to Worthen's (2007) suggestion, Diamanduros, Downs and Jenkins (2008) suggest that school staff members should be questioned about their perceptions and collective knowledge about incidences of cyber bullying in their school and how they feel about the effectiveness of any anti-bullying/anti- cyber bullying efforts being used at their school.

In a "climate of permission for illegal conduct," (Smith, 2001, p. 2), school leaders, administrators and other policy makers should be able to describe the problem of cyber bullying effectively and in detail so that all school personnel, parents and other policy makers understand the problem and can identify it, based on a common definition/framework (Wolak, Mitchell, & Finkelhor, 2007). Descriptions of the phenomenon should not be limited to known incidences or individuals, and should include all forms of advanced technologies including smart phones, game consoles and other Internet-ready devices. Specific modalities should include advanced capabilities such as text messaging and cell phone photography.

METHOD

The purpose of this study was to identify a variable set of characteristics that define cyber bullying and to measure the perceived knowledge of K12 parents and educational professionals about cyber bullying. In this chapter, survey instrument creation and validation is discussed in Study One, followed by the methodology of the national launch of the Cyber bullying Knowledge Survey in Study Two. Both studies will include description of survey participants, details of the methodology for each study and the procedures followed to complete each study. Study One will also include a discussion of the results from the instrument validity and usability testing. The method of statistical analysis in Study Two will be discussed at the end of this chapter, followed by a summary of both Studies.

Study One: Instrument Development and Validity Testing

Study one was the creation of the Cyber bullying Knowledge Survey (CBKS) and the requisite validity/usability testing. The survey validation was conducted to identify issues or concerns with survey items and construction. Upon completion of the instrument content and validity testing, the CBKS was modified based on recommendations from both panels.

Participants

Validity testing. Twenty participants were recruited to participate in the validity testing of the CBKS. The panel included experts in the fields of education law; assessment and evaluation; and, teacher/administrator preparation, school counseling and school safety. Experts were recruited from a population of: higher education faculty who teach education law, assessment and evaluation and teacher/administrator preparation; lawyers familiar with the cyber bullying phenomenon; or, individuals known for their expertise in the field of cyber bullying.

Usability testing. A group of 25 individuals were asked to participate in this testing. This group included parents, higher education students and higher education faculty, and was meant to represent an example of the larger population projected for use in this study.

Instrument Development

The first step in this research study was the discovery and collection of all state legislation that includes anti-cyber bullying language, which includes legislation from approximately 20 states. A preliminary examination of all the state anti-cyber bullying statutes revealed three unique domains that legally define cyber bullying:

1. Cyber bullying devices – how cyber bullying is accomplished; the types of technology that can be used to create and distribute this phenomenon;
2. Cyber bullying targets – who cyber bullying can be directed against (i.e., students, teachers, administrators, etc.); and,
3. Cyber bullying reasons – the motivation(s) for, or intent of, this phenomenon.

A domain is defined as a "taxonomic category," taxonomy being an orderly classification of items, according to presumed natural relationships (Merriam-Webster Online). For the purpose of Study One, each identified domains, and its corresponding descriptive terms, were used to develop survey items to be included on the CBKS instrument.

Q-sort analysis of domains and terms. After completing a more in-depth analysis of existing state anti-cyber bullying laws, where individual terms were identified and distributed to the corresponding domain, a quantitative frequency analysis was performed on each set of terms to determine which terms appeared most often the legislative language. Using the Statistical Package for the Social Sciences (SPSS), version 21.0, a descriptive frequency analysis was performed to determine the frequency of term usage across all versions of anti-cyber bullying

legislation. This analysis assisted in identifying terms that should be included on the survey instrument developed for this research study.

The frequency analysis of each set of terms yielded the following results:

- The nine most likely devices to be used to cyber bully;
- The seven most likely groups who could be targets of cyber bullying;
- The nine most likely motivations for cyber bullying.

The most frequently used terms, in each domain, were accepted as legally defensible terminology for the purpose of defining cyber bullying. (See Appendix A for a complete list of state statutes reviewed.)

CBKS item development. Three sections of the CBKS instrument were designed to capture the perceptions of survey participants about selected terms most likely represent cyber bullying as well as an estimate of their degree of certainty as to how their responses align with a set of cyber bullying descriptors derived from a review of current anti cyber bullying law (Bruttomesso, et al, 2002). Each section of the CBKS corresponded to the three identified domains of cyber bullying terms. Questions developed for each section contained two parts:

- Part one asked the survey participant to agree or disagree that a term they were given could be used to define cyber bullying. This is a YES/NO question.
- Part two asked the survey participant to decide how much they agreed with their choice in part one and how much they believed that the given term should be included in an official definition of cyber bullying. This is a Likert-scale type item.

Additional questions were included on the CBKS to gather demographic data from participants such as job function and number of years in education. Two questions asked participants to identify the state in which they work or attend classes and what type of local they work in

(urban, suburban, or rural). Demographic questions were included in the CBKS to allow for a more discrete analysis of participant responses.

Distractor terms. Distractor terms were included in each of the three domains. These terms were added to the list of terms in each domain because they do not appear in existing state anti-cyber bullying legislation as descriptors that exemplify the cyber bullying phenomenon. Researchers have identified and recognized additional ways in which cyber bulling can manifest as well as who could be victimized and what types of attitudes or feelings can motivate someone to cyber bully. These terms were not discovered in any cyber bullying laws, and were included in the CBKS in order to expose any possible disconnect between how parents and educational professionals describe cyber bullying as compared to how current anti cyber bullying legislation describes cyber bullying.

Summary. Given their origin, the terms identified during the instrument development phase of Study one was provided an undeniable degree of content validity for the CBKS. However, instrument content validity was further explored through the examination of the CBKS by a panel of experts, whose backgrounds include expertise in education law; cyber bullying and assessment. Instrument usability testing was also conducted to identify issues or concerns with survey items and construction.

Instrument Validation

Instrument. The CBKS used in the validation process was created using the variable sets derived from a review of current state anti-cyber bullying legislation.

Procedure. Members of the survey validation panel were sent an introductory email, asking for their participation in the validation process. Embedded in the email was a link to the

online version of the CBKS. The panel was asked to evaluate the CBKS instrument to determine if the instrument:

- Represented the spirit and the letter of current state legislation in describing cyber bullying;
- Included items that are clearly worded in a manner as to accurately assess parents and educational professionals' perceived knowledge of cyber bullying; and,
- Included items that can be accurately analyzed to determine the relative legal literacy of educators about cyber bullying.

The CBKS was reformatted for the validation study, in such a way as to give panelists the opportunity to comment on each item on the survey through the use of a text box included at the end of each item. Participants were asked to examine the questions and provide comments in the text box before proceeding to the next question. Follow up with each panelist included an emailed thank you note for their participation in the testing and a link to sign up to receive the final results of this research study.

Instrument Usability Testing

Instrument. The CBKS used in the validation process was created using the variable sets derived from a review of current state anti-cyber bullying legislation.

Procedure. A slightly altered version of the CBKS was distributed to all usability participants via email. The email included a request for their participation and an explanation of the steps involved in testing the CBKS for usability. Participants were not asked to forward the link to other interested parties, as only their comments were being solicited. The survey was distributed to the participant panel to determine if potential participants/respondents would:

- Understand the layout/design of the study;

- Understand the terms and other "jargon" used in the survey items; and,
- Understand what the survey is attempting to measure.

Comments and concerns regarding the usability of the survey were requested to be sent via email to the researcher at the end of a two week period.

Validation and Usability Study Revisions

The validation panelists commented on the need for rewording some of the demographic questions to give participants more diverse ways to respond (i.e., add another category to the question about roles in education) or adding other demographic questions to further enhance the quality of participant response. Adding a good operational definition of cyber bullying to the survey was the most frequent comment received. Several panelists agreed that the term should be defined throughout the survey in order to avoid misinterpretation of a question by a participant. Usability testers had no comments on the need for more explanation of the questions or the amount of jargon used in the survey. Anecdotal feedback from the usability panelists only included praise of the quality of the survey and the need for it to be made available to more parents and educational professionals during the national launch.

Study Two: CBKS National Launch

Participants

The target population for this research study included pre service and in service teachers, student services personnel (psychologists and counselors), school administrators, school resources officers, school law attorneys, and, higher education faculty and students involved in teaching school law, teacher preparation and educational administration.

The snowball sampling method was used to solicit survey participation. This sampling technique is based on the concept of "interconnectedness" within a network of people or

organizations. Snowball sampling is a method of deriving sample populations through individual connections within a larger network of people or organizations. Snowball sampling relies on the connections of people within a population and their relative willingness to refer others as potential participants (Neuman, 140). The rationale for using the snowball sampling technique in online environment (i.e., Twitter, FaceBook, etc.) was to reach as many educators in each subgroup as is possible, given the time constraints and other limitations of the study.

Instrument

The Cyber bullying Knowledge Survey (CBKS) was used in this phase of the proposed study. Alterations and improvements recommended Study one were incorporated into a new version of the CBKS. Data about perceived knowledge and degrees of certainty about cyber bullying was collected through participant responses to declarative statements about cyber bullying as well as an estimate of the participant's degree of certainty that their response to statements align with descriptive language contained in current state anti-cyber bullying legislation.

Procedure

Once approval was granted by the JHU Human Investigation Review Board, the CBKS was launched and data was collected for approximately eight weeks. The CBKS was designed to be completed in an online, anonymous environment.

The survey was delivered via SurveyGizmo.com, an online software package for survey design and distribution. It was distributed to target participants through multiple postings on social media sites, micro blogging sites and via email. The first page of the CBKS was altered to include study procedures and information that would normally appear in an introductory email sent to interested participants. Previously identified individuals who had indicated interest in

participating received a short email which included the link to the CBKS. This process was done to eliminate the need for individual emails to be sent to each potential participant.

Individuals who had previously expressed interested in this research study received an email requesting their participation and asking that they forward the link to the CBKS to others who might also be interested in participating, thus improving the chances for increased participation. Survey participants were informed at the beginning of the survey that the anonymity of their responses would be strictly maintained. Participants were also informed that survey data collected during this phase of the research process would only be reported in aggregate form, and would not be represented or reported individually. Participants were solicited from Maryland, Virginia, the District of Columbia, and other states in the U.S.

Data was collected for an eight week period via the SurveyGizmo.com website. Upon completion of data collection, the complete data set was converted to a usable format for analysis and all duplicate or incomplete lines of data were removed. One-hundred thirteen survey responses were identified as usable data and became the data set used for analysis in the research study. At the end of the data collection process, the resulting data set was examined for missing data and was properly formatted for analysis.

Prior to its distribution, a Cronbach's Alpha (α) test for reliability was completed for the CBKS. Results revealed a high level of internal consistency among the survey items in each CBKS domain: (a) devices; (b) victims, and (c) motivations (see Table 1).

Table 1. *Cronbach's α Values for Variable/Variable Certainty for all Domains.*

Domain Variable	*Cronbach's α*	*N of items*
Devices	0.88	10
Devices Certainty	0.96	10
Victims	0.71	7
Victims Certainty	0.83	7
Motivations	0.81	9
Motivations Certainty	0.95	9

Data Analysis

SPSS Frequency Analysis and descriptive analysis were the two most commonly used testing methods used for proving or disproving the research hypotheses posited in this research study. All statistical analysis performed in this phase the research was performed in SPSS, version 21.0.

Several variables were rescaled or recalculated prior to data analysis. The demographic variables role, age and years in service were identified as essential to the inferential analysis proposed by this study.

The Role variable elicited 8 different responses, including groups such as parents, teachers, school administrators, school psychologist/counselors, both higher education faculty and students as well as school resources and lawyers specializing in education law. This variable was collapsed into four levels: (a) teachers; (b) school based personnel; (c) higher education faculty and students; and, (d) parents.

The Age variable elicited four responses including age groups as: 18-24; 25-34, 35-54; and 55 and older. This variable was collapsed in to two levels: (a) 18-34 and (b) 35 years and older because of low cell size.

The Years in Service elicited five responses including groups such as: (a) 1 to 5 years; (b) 6 to 10 years; (c) 11 to 15 years; (d) 16 to 20 years; and, (e) 20 years or more. This variable was collapsed in to 3 levels: (a) 1 to 10 years; (b) 11 to 20 years; and (c) 20 years or more due to low cell size.

New variables were also created from existing variables. The composite variable Accuracy & Certainty was created to combine the levels of accurate selection and levels of certainty for the individual terms within each of the three domains. This new variable measured accuracy and certainty on a scale of one to eight, where one represented the least accuracy and lowest level of certainty; two represented low accuracy and a medium level of certainty; three represented low accuracy and a higher level certainty; four represented low accuracy and highest level of certainty; five represented high accuracy and the lowest level of certainty; six represented high accuracy and a medium level of certainty; seven represented high accuracy and a higher level of certainty; and, eight represented high accuracy and the highest level of certainty.

Also a new composite variable was created for each domain to examine the rate of recognition and level of certainty for legally recognized and unrecognized terms. This variable was created to answer the research hypotheses posited in this research study.

Summary

The procedures completed for this research study included both quantitative and qualitative elements. Quantitative research was conducted to form the basis of the CBKS survey. The CBKS was fully developed and underwent instrument validity and usability testing and was revised based on suggestions and comments from a panel of experts and a panel of 25 individuals, selected from the targeted population. Application was made for approval to

conduct the data collection and was granted. The CBKS was launched and data was collected in an online environment for approximately eight weeks. The created data set was examined for anomalies and discrepancies, and was formatted for statistical analysis. Descriptive analysis was performed to prove or disprove the research study's hypotheses. Testing and analysis concentrated on quantifying and analyzing educational professionals' perceived knowledge and perceptions of cyber bullying, based on personal and professional characteristics.

RESULTS

The purpose of this research was to explore how well survey participants could identify and characterize acts of cyber bullying. The Cyber bullying Knowledge Survey (CBKS) was developed to measure these perceptions. The CBKS was subsequently distributed to several groups of parents and educational professionals, in order to discover individual perceptions of cyber bullying including how it can manifest, who are its potential victims, and what are the motivations of its perpetrators.

Participant Characteristics

The CBKS was distributed to educators across the United States via email and social networking sites. Survey responses were collected from multiple states. Forty-two percent (n = 47) of responses were collected from participants in Maryland. Large groups of responses were also collected from individuals in Pennsylvania (15%, *n* = 17); California (10%, *n* = 21); and Arizona (8%, *n* = 9). The remaining 16% of responses were collected from the District of Columbia (*n* = 4), Minnesota (*n* = 3), North Carolina (*n* = 2), Florida (*n* = 1), Hawaii (*n* = 1), Illinois (*n* = 1), Massachusetts (*n* = 1), Ohio (*n* = 1), Texas (*n* = 2), Virginia (*n* = 1) and Wisconsin (*n* = 1). Information about the locale (urban, suburban, rural) where each participant lived was also collected. Sixty-six percent (*n* = 74) self-reported as living in a suburban locale. Twenty-seven percent (*n* = 31) reported living in an urban locale, and 7% (*n* = 8) reported living in a rural locale.

The data set for this research study included 113 individuals, including 69 teachers (61%), 15 parents (13%), 6 higher education faculty (5%), and 5 Student Services personnel (4%). Thirteen percent (*n* = 15) of participants reported being graduates student with some form of classroom teaching, school counseling/school psychology or educational administration

experience. The remaining five percent included school administrators (n = 3) and public safety personnel (n = 2).

Examination of this data set revealed that survey respondents were overwhelming female, (85%, n = 96), while men comprised 13% (n = 15) of the sample population. Forty percent (n = 45) of respondents ranged in ages from 18 to 45, while 51 percent (n = 57) ranged in age from 35 and older. Eight-six percent (n = 97) self-reported as being Caucasian. Twelve percent (n = 13) reported as being Hispanic, Asian/Pacific Islander or Other/Multi-Racial, with Other/Multi-Racial being the largest sub category (n = 8).

Information about education experience among survey participants was also collected on this survey. Sixty-one respondents (54%) reported having between one and 10 years experience in education. Nineteen respondents (17%) had 20+ experience, and 29 respondents (26%) reporting having between 11 and 20 years of experience in education. Three percent (n = 4) of the respondents did not respond to the question.

See Table 2 for more information on the demographics of this sample population.

Table 2. *Frequency Distribution for Participant Characteristics.*

Participant Characteristic	*N*	*%*
Role in Education		
Teacher	69	61
School Based Personnel	10	9
Higher Ed. Faculty/Students	19	17
Parents	15	13
Age		
18 – 34	45	40.5
35 +	66	59.5
Years in Service		
1 – 10 years	61	56
11 – 20 years	29	26
20 + years	19	17

Data Analysis

Research question 1.1 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized devices used to cyber bully, based on the participants' role in education. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 3. Results of the mixed model ANOVA (see Table 6) indicated no significant effect of Role and a significant effect of Devices, F (1, 92) = 11.38, $p < .05$. There was no significant interaction of Role by Devices.

Research question 1.2 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized devices used to cyber bully, based on the participants' age. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 3. Results of the mixed model

ANOVA (see Table 6) indicated no significant effect of Age and a significant effect of Devices, F (1, 93) = 22.75, $p < .05$. There was no significant interaction of Age by Devices.

Research question 1.3 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized devices used to cyber bully, based on the participants' number of years in service. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 3. Results of the mixed model ANOVA (see Table 6) indicated no significant effect of Years in Service and a significant effect of Devices, F (1, 90) = 11.82, $p < .05$. There was no significant interaction of Years of Service by Devices.

Examination of the means and standard deviations for legally recognized and unrecognized devices indicated that participants, regardless of role, age or number of years in service correctly, and with greater levels of certainty, identified significantly more legally unrecognized devices that those that are legally defined.

Research hypothesis 1.0 was partially supported.

Table 3. *Means and Standard Deviations of Accuracy and Certainty for Legally Recognized and Unrecognized* ***Devices*** *by Personal Characteristics.*

Source	Legally recognized *M (SD)*	Unrecognized *M (SD)*
Role		
Teacher	5.94 (1.26)	6.47 (1.32)
School Personnel	6.25 (1.14)	7.04 (0.98)
Higher Ed Faculty/Students	5.82 (1.30)	6.27 (1.35)
Parents	5.41 (1.21)	5.31 (2.17)
Total	5.88 (1.25)	6.33 (1.49)
Age		
18-34	5.78 (1.27)	6.41 (1.52)
35+	5.91 (1.23)	6.23 (1.47)
Total	5.86 (1.24)	6.31 (1.48)
Years in Service		
1-10 years	5.98 (1.19)	6.50 (1.50)
11-20 years	5.73 (1.24)	6.08 (1.40)
20+ years	5.93 (1.36)	6.29 (1.40)
Total	5.91 (1.22)	6.36 (1.45)

Table 6. *Mixed Model ANOVA Comparing the Accuracy and Certainty for Legally Recognized and Unrecognized **Devices** by Personal Characteristics.*

Source	*df*	*MS*	*F*
Between			
Role	3	7.02	2.20
Error	92	3.18	
Within			
Legally Recognized/Unrecognized Devices	1	5.22	11.38*
Legally Recognized/Unrecognized Devices X Role	3	0.87	1.91
Error	92	0.46	
Between			
Age	1	0.03	0.01
Error	93	3.30	
Within			
Legally Recognized/Unrecognized Devices	1	10.65	22.75*
Legally Recognized/Unrecognized Devices X Age	1	1.14	2.43
Error	93	0.47	
Between			
Years in Service	2	0.15	0.74
Error	90	0.49	
Within			
Legally Recognized/Unrecognized Devices	1	5.81	11.82*
Legally Recognized/Unrecognized Devices X Years in Service	2	0.15	0.31
Error	90	0.50	

*$p < 0.05$

Research question 2.1 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized victims of cyber bullying, based on the participants' role in education. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 4. Results of the mixed

model ANOVA (see Table 7) indicated no significant effect of Role and a significant effect of Victims, F (1, 85) = 31.43, $p < .05$. There was no significant interaction of Role by Victims.

Research question 2.2 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized victims of cyber bullying, based on the participants' age. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 4. Results of the mixed model ANOVA (see Table 7) indicated no significant effect of Age and a significant effect of Victims, F (1, 85) = 61.11, $p < .05$. There was no significant interaction of Age by Victims.

Research question 2.3 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized victims of cyber bullying, based on the participants' number of years in service. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 4. Results of the mixed model ANOVA (see Table 7) indicated no significant effect of Years in Service and a significant effect of Victims, F (1, 83) = 48.91, $p < .05$. There was no significant interaction of Years of Service by Victims.

Examination of the means and standard deviations for legally recognized and unrecognized victims indicated that participants, regardless of role, age or number of years in service, correctly and with greater levels of certainty identified significantly more legally unrecognized victims that those that are legally defined.

Research hypothesis 2.0 was partially supported.

Table 4. *Means and Standard Deviations of Accuracy and Certainty for Legally Recognized and Unrecognized **Victims** by Personal Characteristics.*

Source	Legally recognized *M (SD)*	Unrecognized *M (SD)*
Role		
Teacher	4.18 (1.23)	5.26 (1.11)
School Personnel	4.06 (0.41)	4.74 (0.64)
Higher Ed Faculty/Students	4.20 (1.76)	5.40 (1.02)
Parents	4.52 (1.57)	5.22 (1.20)
Total	4.22 (1.32)	5.22 (1.07)
Age		
18-34	4.13 (1.20)	5.29 (0.98)
35+	4.30 (1.43)	5.21 (1.13)
Total	4.22 (1.33)	5.25 (1.06)
Years in Service		
1-10 years	4.16 (1.12)	5.20 (1.01)
11-20 years	3.99 (1.42)	5.21 (1.22)
20+ years	4.58 (1.56)	5.33 (1.16)
Total	4.19 (1.28)	5.23 (1.08)

Table 7. *Mixed Model ANOVA Comparing of Accuracy and Certainty for Legally Recognized and Unrecognized **Victims** by Personal Characteristics.*

Source	*df*	*MS*	*F*
Between			
Role	3	0.88	0.40
Error	85	2.17	
Within			
Legally Recognized/Unrecognized Victims	1	24.16	31.43*
Legally Recognized/Unrecognized Victims X Role	3	0.47	0.62
Error	85	0.77	
Between			
Age	1	0.10	0.48
Error	85	2.16	
Within			
Legally Recognized/Unrecognized Victims	1	46.05	61.11*
Legally Recognized/Unrecognized Victims X Age	1	0.69	0.92
Error	85	0.75	
Between			
Years in Service	2	0.50	0.71
Error	83	0.70	
Within			
Legally Recognized/Unrecognized Victims	1	34.40	48.91*
Legally Recognized/Unrecognized Victims X Years in Service	2	0.50	0.71
Error	83	0.71	

*$p < 0.05$

Research question 3.1 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized motivations for cyber bullying, based on the participants' role in education. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 5. Results of the mixed model ANOVA (see Table 8) indicated no significant effect of Role and a significant

effect of Motivations, F (1, 34) = 17.60, $p < .05$. There was no significant interaction of Role by Motivations.

Research question 3.2 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized motivations for cyber bullying, based on the participants' age. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 5. Results of the mixed model ANOVA (see Table 8) indicated no significant effect of Age and a significant effect of Motivations, F (1, 34) = 36.21, $p < .05$. There was no significant interaction of Age by Motivations.

Research question 3.3 investigated whether there was a significant difference in levels of accuracy and certainty when identifying legally recognized and unrecognized motivations for cyber bullying, based on the participants' number of years in service. This hypothesis was tested using a mixed model ANOVA. Means and standard deviations are shown in Table 5. Results of the mixed model ANOVA (see Table 8) indicated no significant effect of Years in Service and a significant effect of Motivations, F (1, 35) = 20.47, $p < .05$. There was no significant interaction of Years of Service by Motivations.

Examination of the means and standard deviations for legally recognized and unrecognized motivations indicated that participants, regardless of role, age or number of years in service correctly and with greater levels of certainty identified significantly more legally recognized motivations that those that were not legally defined.

Research hypothesis 3.0 was partially supported.

Table 5. *Means and Standard Deviations of Accuracy and Certainty for Legally Recognized and Unrecognized **Motivations** by Personal Characteristics.*

Source	Legally recognized *M (SD)*	Unrecognized *M (SD)*
Role		
Teacher	3.39 (0.66)	2.61 (0.89)
School Personnel	3.78 (0.46)	3.00 (1.00)
Higher Ed Faculty/Students	3.36 (0.67)	2.29 (0.49)
Parents	2.96 (0.97)	2.67 (1.53)
Total	3.40 (0.67)	2.61 (0.89)
Age		
18-34	3.48 (0.67)	2.55 (0.89)
35+	3.31 (0.67)	2.67 (0.91)
Total	3.40 (0.67)	2.61 (0.88)
Years in Service		
1-10 years	3.50 (0.74)	2.70 (0.95)
11-20 years	3.16 (0.43)	2.43 (0.54)
20+ years	3.19 (0.26)	2.25 (0.96)
Total	3.40 (0.67)	2.61 (0.89)

Table 8. *Mixed Model ANOVA comparing of Accuracy and Certainty for Legally Recognized and Unrecognized **Motivations** by Personal Characteristics.*

Source	*df*	*MS*	*F*
Between			
Role	2	0.72	0.51
Error	24	0.92	
Within			
Legally Recognized/Unrecognized Motivations	1	5.93	17.60*
Legally Recognized/Unrecognized Motivations X Role	3	0.22	0.64
Error	34	0.33	
Between			
Age	1	0.01	0.14
Error	36	0.93	
Within			
Legally Recognized/Unrecognized Motivations	1	11.78	36.21*
Legally Recognized/Unrecognized Motivations X Age	1	0.39	1.19
Error	34	0.33	
Between			
Years in Service	2	7.04	0.08
Error	35	0.33	
Within			
Legally Recognized/Unrecognized Motivations	1	7.05	20.47*
Legally Recognized/Unrecognized Motivations X Years in Service	2	0.03	0.08
Error	35	0.34	

*$p < 0.05$

DISCUSSION

This study examined the perception of cyber bullying among parents and educational professionals, and compared their collective perceptions to the ways in which cyber bullying is legally defined. In approximately 20 U.S. States, anti-bullying legislation specifically recognizes three characteristics of cyber bullying: (a) devices used to cyber bully; (b) potential groups who can be victims of cyber bullying; and (c) motivations for cyber bullying. It is important for educational researchers to understand how cyber bullying is perceived in U.S. schools, as well as determine whether or not parents and educational professionals identify cyber bullying in the same manner as it is legislatively defined. Perceptions about cyber bullying among parents and educational professionals have a direct effect on the ability to protect children and adolescents from this destructive behavior.

Equally important to the goals of this research project was the statistical testing performed to determine if a disparity existed between how cyber bullying is legally defined and to how it is perceived by parents and educational professionals. Results of hypothesis testing revealed a very limited success rate by study participants in their ability to identify legally recognized cyber bullying terms. The existence of this disparity between legal definition and individual perception was confirmed through discrete testing and analysis of all research hypotheses proposed in this research study.

Summary and Interpretation of Research Hypotheses

Research Hypotheses

Research hypothesis 1. This research hypothesis suggested that personal characteristics (age, role in education and years in service) would have a significant influence on the accuracy of study participants in recognizing legal terminology that identifies devices that could be used to

cyber bully. Further examination of testing results indicated that participants, regardless of role, age or number of years in service, correctly, and with greater levels of certainty, identified significantly more legally unrecognized devices than those that are legally recognized.

Results of this research hypothesis supported the concept that current state anti-cyber bullying legislation does not include adequate representation of advanced technologies that can be used to cyber bully. Study participants accurately, and with a greater degree of certainty, recognized those devices that are not identified in existing legislation. The inability of participants to identify devices that are included in existing legislation further supports the theory that a disparity exists between the ways parents and education professionals perceive cyber bullying and the ways in which legislation defines cyber bullying.

Electronic technologies used to cyber bullying are identified by state legislation in approximately 20 states. However, these legal terms are outdated, as they include the use of a pager as a mode of cyber bullying. The legally defined terms also include such things as land line telephones and identify several types of web sites that are no longer in use by children and adolescents. Terms that are not included in these laws include: (a) social media sites (e.g., Facebook, MySpace); (b) microblogging sites (e.g., Twitter, Instagram); and (c) viral video sites such as YouTube. Inclusion of outdated technology terms and the absence of terms that describe more advanced technologies support the theory that a sizable disparity exists between how cyber bullying is legally defined and how it is perceived by parents and educational professionals.

Research hypothesis 2. This research hypothesis posited that personal characteristics (age, role in education and years in service) would have a significant influence on the accuracy of study participants in recognizing legal terminology that identifies potential victims of cyber bullying. Further examination of testing results indicated that participants, regardless of role, age

or number of years in service, correctly, and with greater levels of certainty, identified significantly more legally unrecognized terms characterizing potential cyber bullying victims than those terms that legally characterize potential victims of cyber bullying.

Results for this research hypothesis supported the concept that current state anti-cyber bullying legislation does not include adequate representation of individuals/groups who could be potential cyber bullying targets. Study participants accurately, and with a greater degree of certainty, recognized those individuals/groups that are not identified in existing legislation. The inability of participants to identify groups that are included in existing legislation further supports the theory that a disparity exists between the ways parents and education professionals perceive cyber bullying and the ways in which legislation defines cyber bullying.

Advances in personal technologies have made virtual communication between individuals very simple. Cyber bullies have a unique opportunity to victimize others in a nearly anonymous environment, which is ungoverned and infinite. The vastness and unregulated nature of communication possible on the Internet and the World Wide Web makes possible for someone with adequate knowledge can maliciously target individuals (or groups) with marginal supervision of thought or deed. The lack of laws and enforcement of the virtual world puts at risk that anyone who is personally connected to the Internet or the World Wide Web to be a victim of cyber bullying regardless of age, race, gender or any other demographic characteristic.

Research hypothesis 3. This research hypothesis posited that personal characteristics (age, role in education and years in service) would have a significant influence on the accuracy of study participants in recognizing legal terminology that identifies motivations for cyber bullying. Further examination of testing results indicated that participants, regardless of role, age or number of years in service, correctly, and with greater levels of certainty, identified

significantly more legally recognized terms characterizing potential motivations for cyber bullying than those terms that do not legally characterize potential motivations for cyber bullying.

Results of this hypothesis supported the concept that current state anti-cyber bullying legislation does include adequate representation of the motivations for cyber bullying. Study participants accurately, and with a greater degree of certainty, recognized those individuals/groups that are identified in existing legislation. The ability of participants to identify motivations that are included in existing legislation supports the position theory that, in the specific case of motivations, no real disparity existed between the ways parents and education professionals perceive cyber bullying and the ways in which legislation defines cyber bullying.

Research hypotheses 1, 2 and 3 of this research study posited that the personal characteristics (age, role in education, years in service) would influence the accuracy and level of certainty of study participants, when identifying the legally recognized and unrecognized terms that define cyber bullying. Results of statistical testing did not completely support these hypotheses. An examination of the means and standard deviations for each set of terms reveal that regardless of role, age or number of years in service, participants were able to correctly, and with greater levels of certainty, significantly identify more of the unrecognized terms than those terms that legally define cyber bullying, except in the case of terms describing specific motivations for cyber bullying. In the case of the terms associated with motivations, participants were better able to correctly identify, with a higher degree of certainty, the terms that legally describe motivations for cyber bullying.

Implications for Parents and Educational Professionals

Cyber bullying is as cruel as it is novel and has created considerable legal and policy issues for educators (O'Neill, 2008). Perceived as an unintended consequence of ubiquitous technology use, cyber bullying should be acknowledged as a destructive phenomenon that can "stall the social growth" of children and adolescents (Mansbacher, 2010). This disruptive behavior is proliferating at an astonishing rate in U.S. K12 schools. The social and emotional impact of cyber bullying has been shown to be overwhelming, and it is vital that parents and educational professionals are able to recognize the signs of cyber bullying; the symptoms of cyber bullying being experienced by the victim; and, be equipped with the knowledge and tools to disrupt the act and prevent future incidents.

An unfortunate byproduct of cyber bullying is the mass media's tendency to spotlight its potential for horrific consequences. From 2003 to 2013, six adolescents (ages 13 to 17) committed suicide because they were allegedly cyber bullied. Mass media coverage of these six tragic deaths only represents of fraction of the countless cyber bullying victims who suffer less severe consequences. Viewed through the lens of mass media, the deaths of six adolescents due to cyber bullying were so shocking that cyber bullying became a topic of societal outrage. Unfortunately this anger and indignation concerning cyber bullying has led to little meaningful civic dialogue about what cyber bullying is; what it is not; and how it can be combatted and eradicated. No common definition of cyber bullying exists presumably because of the nebulous nature of the phenomenon and the inability of society to agree on a legally defensible definition, or how to address the problem collectively.

In the years between 2003 and 2013, little action has been taken by the legal community to criminalize cyber bullying. As of 2014, only two states have passed legislation that can enforce substantial fines and monetary penalties on individuals convicted of cyber bullying.

However, the definition of cyber bullying written into these laws is ambiguous. As a result, imposing and enforcing consequences for cyber bullying can be a challenge for school personnel; state and local education agencies have received little to no advice about how to address incidences of cyber bullying and mete out punishments that are legally responsible. Generally, educators are being advised to create Acceptable Use Policies that "model appropriate use of technology."

Society needs to move beyond emotion to accept and support the legal specificity of existing anti cyber bullying legislation. Parent and educational professionals would like to see zero-tolerance policies created to address incidents of cyber bullying, but a zero-tolerance policy may not be legal if it does not include the legally recognized terms that define and criminalize cyber bullying. Morally and ethically correct, zero-tolerance cyber bullying policies have no value if they do not align with existing legislation. Technology policies written by schools, local education agencies, or at the state level might be morally and ethically appropriate, but the policy must align with any state-level legislative definition in order to have any impact on curbing this destructive behavior.

Recommendations for Policy and Practice

More information about the consequences of bullying and harassment on individual lives, academic achievement, and the school environment can help educators identify the cause of behavioral or academic difficulties caused by cyber bullying. Educational professionals and parents should become aware of how to recognize and respond to online harassment. Parents must be vigilant in monitoring their student's cyber activities at home and educational professionals must be made aware of this insidious problem and be informed as to how to mitigate, recognize, and prevent cyber bullying.

Understanding and supporting the appropriate use of technology is a first step in combatting cyber bullying. Creating and implementing an "Acceptable Technology Use" (ATU) policy is imperative for any school and should always apply to students, faculty and staff. A clearly worded ATU policy should be developed to include those devices that are brought into the school by students, faculty and staff. As technology continues to develop and is made available to more segments of society, students are more inclined bring their own personal technology to school. It is important to have "ATU" policies in place that regulate use of individually-owned technologies. Including a section on the acceptable use of "Bring Your Own" devices can help limit the use of these technologies in the learning environment or exclude them entirely from use within the walls of the school.

School Resource Officers (SRO) can play a unique yet important role in any cyber bullying prevention and intervention activities. Their specialized training and point of view allows for an atypical observation of student behavior. Information about possible incidences of cyber bullying might be shared among students if they feel they are not being monitored by a teacher or other school personnel. This provides unique opportunities for the SRO to identify and prevent incidences of cyber bullying.

School administrators should work to educate teachers and staff about electronic bullying, its dangers and what to do if it is suspected. In future studies, a series of questions assessing a variety of forms of electronic aggression (e.g., instant messaging, chat rooms, text messaging) would provide a more accurate picture of the scope, nature, and impact of cyber bullying. The Cyber bullying Knowledge Survey (CBKS), developed as part of this research study, could be used to assess current perception about cyber bullying, among educational professionals, regardless of academic level (e.g., elementary, middle, high school) or location

(e.g., school based, district/agency-based, state-wide). Analysis of data collected from the CBKS could drive the development of professional development programs that address the issue of cyber bullying.

Sharing information about which communication tools are likely to be used for online harassment is critical in helping teachers and school-base personnel identify cyber bullying. Developing and implementing appropriate anti cyber bullying curriculum, programs and/or interventions strategies can facilitate the safety of all students. Student directed disciplinary councils, peer mediation groups and peer mentoring groups are all examples of positive interventions that can mitigate or prevent acts of cyber bullying.

Student Codes of Conduct and Commitment Codes can also be implemented to prevent cyber bullying because they hold individuals accountable to a set of standards that govern online and offline behaviors. Additionally, school personnel should be encouraged to discuss individual incidences of cyber bullying with both the victim and the offender, in order to help the victim, their parent/guardian and the school determine the most appropriate response(s) to the incident.

Results of this research suggest that existing definitions of cyber bullying have not kept pace with advancements in personal digital technologies. Updating the legal terminology associated with cyber bullying is crucial, including the addition of newer terms that represent advanced technologies. Parents and educational professionals would be benefit greatly from legislative updates that include updated lists of devices, how they may be used to cyber bullying, what might motivate someone to cyber bully, and what symptoms to look for in potential victims.

Recommendations for Future Research

The implications of this research study are noteworthy. The dearth of literature and research on the topic of cyber bullying, and how it is perceived by parents, educational professionals, and lawmakers is significant. As this pernicious behavioral phenomenon is spreading through the U.S. public school system, it is important to realize the deficit of knowledge possessed by parents and educational professionals about cyber bullying and how it is affecting classrooms and school cultures across the country. To paraphrase a previous statement from this research study, people cannot defeat what they do not recognize.

In an attempt to determine how laws define cyber bullying and how parents and educational professional perceive it, this study has established a process for capturing the perceptions about cyber bullying across multiple populations, using a method that includes legislative definitions of the phenomenon. This new process includes a scientifically valid instrument for gathering data and a mixed model plan for analyzing and interpreting collected data. Now the opportunity exists for more grounded discussions about cyber bullying, its nature, and how it can be generally or even legally defined.

The research study contributes to the body of cyber bullying research in a meaningful way, as noted previously in this narrative; very few studies have been conducted studying the perceptions of parents and educational professionals about cyber bullying. This research study provides the opportunity for other cyber bullying researchers to capture and analyze current perceptions of cyber bullying in the classroom, in the school and across higher levels of educational practice.

To date, no studies have been located that ask educators to specifically identify or define cyber bullying. This study begins that dialogue. In order to prevent cyber bullying, those who interact with children and adolescents must first know how to recognize it. Teachers can only

intervene effectively if they understand the nature of the problem (Hannah, 2010; Glasner, 2010). It is important that parents and educational professionals understand three important points about cyber bullying: (a) the role of technology in the social development of children and adolescents is not going away, (b) both bullying and cyber bullying happen under different conditions and in different ways, and (c) professional development activities that include information about cyber bullying are as important as training educational professionals on the need for Internet safety (Glasner, 2010; Englander & Muldowney, 2007). School administrators should also understand this new frontier of bullying and be willing to provide the requisite training for teachers and parents to help educators to understand and intervene.

Limitations

The major limitation of this study was its small sample size. A sample of 113 parents and educational professionals is limited and does not adequately represent the vast population of parents with children and adolescents currently enrolled in U.S. schools, nor could it possibly represent the multitude of educational professionals who interact with children and adolescents in U.S. schools. Future sample populations should be derived from a specific segment of educational professional and/or parents. This focused distribution could potentially yield a more dynamic data set that adequately represents the target population of any proposed research study.

A snowball sampling technique was used to distribute the Cyber bullying Knowledge Survey. This distribution technique was not robust enough to gather a plentiful number of completed surveys in the eight weeks allotted for data collection. Email distribution and Facebook. In future studies where the CBKS is employed, taking advantage of the popularity of microblogging sites (e.g., Twitter, Instagram) combined with more exposure on other social media sites (e.g., Facebook, LinkedIn) could improve the survey response rate.

Conclusions

This research project examined the perceptions of cyber bullying among parents and educational professionals in an effort to produce a specialized set of cyber bullying characteristics. The project also intended to prove that a disparity exists between how cyber bullying is legally defined and how it is perceived among parents and educational professionals. Hypothesis testing revealed that the perceptions about cyber bullying among study participants do not completely align with current legal definitions of cyber bullying.

As technologies advance so do the ways in which individuals can be cruel to each other. The use of electronic communications technologies by children and adolescents is unlikely to wane in the future; therefore continued scrutiny of all types of electronic aggression is critical. Teachers, school staff and administrators in U.S. schools need to be knowledgeable about the different forms cyber bullying can take and the extent to which it can be damaging both to an individual victim and to a school's culture. Educational professionals and parents must also be prepared to intervene, monitor, and prevent the incidence of cyber bullying.

Parents also need to be mindful of this malicious behavior, as several alleged incidences of cyber bullying in the U.S. have resulted in the suicide of the victim. Children and adolescents are reluctant to report any incident of cyber bullying that does not involve death threats, for fear their parents will restrict their time online or discover information posted online that they do not want their parents to see. Parents should be able to recognized behaviors associated with cyber bullying victims. They should also understand what kind of damage cyber bullying can inflict on social and emotional well-being of children and adolescents.

Even with their myriad of responsibilities, educational professionals must be vigilant in their detection and prevention of cyber bullying. As is often the case that no two educational

professionals can agree on what constitutes an act of cyber bullying, nor are they aware of its legal definition. The ultimate pursuit of this research was to create a set of legally defensible/universally acceptable indicators that educational professionals could use when evaluating a possible incidences of cyber bullying.

School personnel are crucial in providing the community leadership necessary to bring educators, parents, students and other community members together to address concerns of cyber bullying and Internet safety. New types of advanced technologies are not regulated by any one agency, so adolescents, parents, schools and technology-related businesses must work together to create a coordinated strategy that is flexible enough to evolve as technology and electronic aggression change. Knowledge and vigilance are significant in the fight against cyber bullying.

REFERENCES

Adolescent Web Awareness Requires Education (AWARE) Act of 2009. H.R. 3630, 111th Cong. (2009).

Agatson, P.W., Kowalski, R. & Limber, S. (2007). Students' perspective on cyber bullying. *Journal of Adolescent Health, 41*(6, Suppl), S29-S60.

Arora, C.M.J. (1996). Defining bullying: Towards a clearer general understanding and more effective intervention strategies. *School Psychology International, 17*(4), 317-329.

Arum, R., & Preiss, D. (2008). From the Schoolhouse to the Courthouse: School Discipline and the Law. Retrieved from www.aei.org/event1746.

As bullies go online, schools start cracking down. (2007, December 24). *The Annapolis Capital-Gazette,* p. B5.

Bethel School District v. Fraser, 478 U.S. 675 (1986).

Bradley, A. (2008, October 7). Congress signs off on bill to protect children online. *Education Week, 28*(7), 4.

Brickman-Bhutta, C. (2012). Not by the book: Facebook as a sampling frame. *Sociological Methods Research, 41*(1), 57-88.

Broadband Data Improvement Act of 2008, 47 U.S.C. § 1301 *et seq*. (West, 2008).

Brown, K., Jackson, M., & Cassidy, W. (Dec 2006). Cyber-bullying: Developing policy to direct responses that are equitable and effective in addressing this special form of bullying. *Canadian Journal of Educational Administration and Policy, 57*, 1-35.

Bruttomesso, D., Gagnayre, R., Leclercq, D., Crazzolara, D., Busata, E., & d'Ivernois, J. (2003). The use of degrees of certainty to evaluate knowledge. *Patient Education and Counseling, 51,* 29-37.

Butera, G., Klein, H., McMullan, L., & Wilson, B. (1998). A statewide study of FAPE and school discipline policies. *The Journal of Special Education, 32*(2), 108-114.

Cole, C.M., Cornell, D.G., & Sheras, P. (Apr 2006). Identification of school bullies by survey methods. *Professional School Counseling, (9)*4, 305-313.

Collins, L. (2008, January 21). Friend game: Behind the online hoax that led to a girl's suicide. *The New Yorker*, 35-41.

Colton, D., & Cover, R. W. (2007). *Designing and constructing instruments for social research and evaluation.* San Francisco, CA: Jossey-Bass.

Cook, G. (May 2006). Gauging the climate in urban schools. *American School Board Journal, 193*(5), 8.

Diamanduros, T., Downs, E., & Jenkins, S.J. (2008). The role of school psychologists in the assessment, prevention and intervention of cyber bullying. *Psychology in the Schools, 45*(8), 693-704.

Dahle, S. (2008, March 13). Online speech fits students versus teachers: Pranks bring punishment and free speech lawsuits. Retrieved March 14, 2008 from http://abcnews.go.com/TheLaw/story?id=4431954&page=1

David-Ferdon, C., & Feldman Hertz, M. (2007). Electronic media, violence and adolescents: an emerging public health issue. *Journal of Adolescent Health, 41*(6, Suppl), S1-S5.

Doll, B., Song, S., & Siemers, E. (2004). Classroom ecologies that support or discourage bullying. In D.E. Espelage & S.M. Swearer (Eds.) *Bullying in American schools: A socio-ecological perspective on prevention and intervention, (p. 9).* Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.

Doninger v. Niehoff, No. 07-1129 (D. Conn. Jan 15, 2009).

Englander, E.K. (2007). Is bullying a junior hate crime? Implications for intervention. *American Behavioral Scientist, 51*(2), 205-212.

Englander, E.K., & Muldowney, A.M. (2007). Just turn the darn thing off: Understanding cyber bulling. *Proceedings of Persistently Safe Schools: The 2007 National Conference on Safe Schools and Communities,* 83-92.

Englander, E.K. (2008). Cyber bullying & bullying in Massachusetts: Frequency and motivations. Research brief for the Massachusetts Aggression Reduction Center.

Englander, E.K. (2010). Editorial for the special issue on cyber-bullying. *Journal of Social Sciences, 6*(4), 508-509.

Englander, E.K. (Mar 2012). Addressing bullying and cyber bullying. *The National Psychologist.*

Englander, E.K. (2012). Spinning our wheels: Improving our ability to respond to bullying and cyber bullying. *Child and Adolescent Psychiatric Clinics of North America, 21*(1), 43-55.

Espelage, D.L., & Asidao, C.S. (2001). Conversations with middle school students about bullying and victimization: Should we be concerned? *Journal of Emotional Abuse, 2*(2/3), 49-62.

Esplage, D. L., Holt, M. K., & Henkel, R. R. (2003). Examination of peer-group contextual effects on aggression during early adolescence. *Child Development, 74*, 205–220.

Espelage, D.L., Mebane, S.E., & Swearer, S.M. (2004). Gender differences in bullying: Moving beyond mean level differences. In D.E. Espelage & S.M. Swearer (Eds.) *Bullying in American schools: A socio-ecological perspective on prevention and intervention (pp. 15-35).* Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.

Espelage, D. L., & Swearer, S. M. (Eds.) (2004). *Bullying in American schools: A socio-*

ecological perspective on prevention and intervention. Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.

Facebook may face class action suit, fueled by Canadian law school students. Retrieved July 21, 2009 from: http://www.marketingvox.com/facebooks-paucity-of-privacy-inflames-canadian-privacy-advocates-038948/

Finkelhor, D., Mitchell, K. & Wolak, J. (2006). Online victimization: A report on the nation's youth. Alexandria, VA: National Center for Missing & Exploited Children.

First, P.F., & Hart, Y.Y. (2002). Access to cyberspace: The new issue in educational justice. *Journal of Law & Education, 31*(4), 385-411.

Franek, M. (Dec 3005/Jan 2006). Foiling cyber bullies in the new wild west. *Education Leadership, 63*(4), 34-43.

Gaffney, P.V., & Gaffney, F.M. (1996). Analysis of and educators' attitudes toward the right of public school students regarding mandatory participation in patriotic school exercises. (ERIC Document Reproduction Service No. ED398217)

Glasner, A.T. (2010). On the front lines: Educating teachers about bullying and prevention methods. *Journal of Social Sciences, 6*(4), 535-539.

Gottheil, N.F., & Dubow, E.F. (2001). Tripartite beliefs models of bully and victim behaviors. *Journal of Emotional Abuse, 2*(2/3), 25-47.

Hannah, M. (2010). Cyber bullying education for parents: A guide for clinicians. *Journal of Social Sciences, (6)*4, 532-536.

Harris, S., & Hathorn, C. (2006). Texas middle school principals' perceptions of bullying on campus. *NASSP Bulletin, 90*(1), 49.

Harris, S., & Petrie, G. (2002). A study of bullying in the middle school. *NASSP Bulletin*

86(633), 42-53.

Harris, S., & Petrie, G. (2006). Texas middle school principals' perceptions of bullying on campus. *NASSP Bulletin (90)*1, 49-69.

Hartemeister, F., et al., (November, 2008). *Bullying Statutes*. Preconference session presented at the annual conference of the Education Law Association, San Antonio, TX.

Hazelwood School Dist. V. Kuhlmeier, 484 U.S. 260 (1988).

Holt, M.K., & Keyes, M.A. (2004). Teacher's attitudes towards bullying. In D.E. Espelage & S.M. Swearer (Eds.) *Bullying in American schools: A socio-ecological perspective on prevention and intervention (pp. 121-139).* Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.

Huesmann, L.R. (2007). The impact of electronic media violence: Scientific theory. *Journal of Adolescent Health, 41*, S6-S13.

Hutton, T. (Aug 2006). No rite of passage: Coming to grips with harassment and bullying. *Leadership Insider: Practical perspectives on school law & policy, Aug 2006*(1), 12.

Hutton, T. (March 2007). *Blogging for columbine: Student online activities and the law*. Paper presented at the University of Texas School of Law, 22nd Annual School Law Conference, Austin, TX.

Internet Safety Technical Task Force. (2008). *Enhancing child safety and online technologies: final report of the Internet Safety Technical Task Force to the multi-state working group on social networking of state attorneys general of the United States*. Cambridge, MA: Berkman Center for Internet & Society at Harvard University.

Jeffrey, L., Miller, P., & Linn, M. (2001). Middle school bullying as a context for the development of passive observers to the victimization of others. In Bullying behavior:

Current issues, research, and interventions (pp. 143–156). Binghamton, NY: Haworth.

Jenkins, H., Purushotma, R., Weigel, M., Clinton, K., & Robison, A.J. (2009). *Confronting the challenges of participatory culture: Media education for the 21st century.* Cambridge, MA: The MIT Press.

Juvonen, J., & Gross, E.F. (September, 2008). Extending the school grounds? Bullying experiences in cyberspace. *Journal of School Health, 78*(9), 496-505.

Keith, S., & Martin, M. (Winter 2005). Cyber-bullying: Creating a culture of respect in a cyber world. *Reclaiming Children and Youth, 13*(4), 224-228.

Kiner, H. P. (1995). Nursing student's opinions on interpersonal violence. *Journal of Nursing Education, 34*(7). 325-331.

Klein, J. (2012). *The bully society: School shootings and the crisis of bullying in American schools.* New York: NYU Press.

Klein, S.K., & Martin, M.E. (2005). Cyber-bullying: Creating a culture of respect in a cyber world. *Reclaiming Children and Youth, 13*(4), 224-228.

Kowalski, R.M., & Limber, S.P. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health, 41*(6, Suppl), S22-S30.

Lebrun, M. (2011). *Books, blackboards, and bullets: School shootings and violence in America.* Lanham, MD: Rowen & Littlefield Education.

Leff, S.S., Kuperschmidt, J.B., Patterson, C.J., & Power, T.J. (1991). Factors influencing teacher identification of peer bullies and victims. *School Psychology Review, (28)*3, 505-517.

Leinwald, D. (2009, June 23). Survey: 1 in 5 teens 'sext' despite risks. *USA Today.* Retrieved June 24, 2009 from www.usatoday.com/news/nation/2009-06-23-onlinekids_N.htm.

Lenhart, A. (October, 2008). *Teens & online safety.* Conference session presented at the

Cyberethics, Cybersafety & Cybersecurity Conference, College Park, MD.

Li, Q. (2007). New bottle but old wine: A research for cyber bullying in schools. *Computers in Human Behavior, 23*, 1771-1791.

Mansbacher, J. (2001). Downsides to technology. *Pediatrics for Parents, 26*(5&6), 27-28.

Maryland State Department of Education. (2009). The Fact book. Baltimore, MD: Maryland State Department of Education.

Maryland State Department of Education. (2008). *Maryland public schools: #1 in the nation.* Baltimore, MD: Author. Retrieved from http://www.marylandpublicschools.org/NR/rdonlyres/FCB60C1D-6CC2-4270-BDAA-153D67247324/18996/FACT_BOOK_20072008_12309.pdf

Mason, K.L. (2008). Cyber bullying: A preliminary assessment for school personnel. *Psychology in Schools, 45*(4), 323-348.

McDevitt, J. (1997). The Hate Crimes Prevention Act. Testimony before the House Judiciary Committee. Washington, DC.

Megan Meier Cyber bullying Prevention Act of 2009. H.R. 1966, 111th Cong. (2009).

Meyers, A.B., & Sylvester, B.A. (2006). The role of qualitative research methods in evidence-based practice. *NASP Communique, 34*(5), 1-10.

Miller, D.N., & Jome, L.J. (2008). School psychologists and the assessment of childhood internalizing disorders: Perceived knowledge, role preferences and training needs. *School Psychology International, 29*(4), 500-510.

The National Campaign to Prevent Teen and Unplanned Pregnancy. (n. d.). *Sex and tech: Results from a survey of teens and young adults.* Retrieved November 20, 2009 from http://www.thenationalcampaign.org/sextech/PDF/SexTech_Summary.pdf

National School Board Association (2009, Sept.). *School bullying laws currently offer little protection*. Retrieved November 19, 2009 from http://www.nsba.org/SecondaryMenu/COSA/Search/AllCosaDocuments/School-bullying-laws.aspx

National Threat Assessment Center (2002). The final report and findings of the safe school initiative. Retrieved May 2, 2007 from http://www.secretservice.gov/ntac/ssi_final_report.pdf

Naylor, P, Cowie, H., Cossin, F., de Bettencourt, R., & Lemme, F. (2006). Teachers' and pupils' definitions of bullying. *British Journal of Educational Psychology, 76,* 553-576.

Neuman, W.L. (2004). *Basics of social research: Qualitative and quantitative approaches.* Boston, MA: Pearson Education, Inc.

Oblinger, D. (2003, January). Boomers, gen-xers & millennials: Understanding the "new students." *EDUCAUSE Review* 38(4), 37-47.

Olweus, D. (1993). *Bullying at school.* Cambridge, MA: Blackwell.

Olweus, D. (October, 1994). Bully at school: Basic facts and effects of a school based intervention program. *The Journal of Child Psychology and Psychiatry and Allied Disciplines, 35*, 1171-90.

O'Neil, R.M. (2008, July). It's not easy to stand up to cyber bullies, but we must. *The Chronicle for Higher Education, 54*(44). Retrieved July 9, 2008 from http://chronicle.com/weekly/v54/i44/44a02301.htm

Opinion Research Corporation. (July, 2006). *Cyber bully teen report.* Prepared for Fight Crime: Invest in Kids, Washington, DC. Retrieved August 20, 2006 from http://www.fightcrime.org/cyber bullying/cyber bullyingteen.pdf

Pellegrini, A. D. (2001). The roles of dominance and bullying in the development of early heterosexual relationships. *Journal of Emotional Abuse, 2*(2/3), 63-73.

Pellegrini, A. D., & Bartini, M. (Fall 2000). A longitudinal study of bullying, victimization, and peer affiliation during the transition from primary to middle school. *American Education Research Journal, 37*(3), 699-725.

Pellegrini, A.D., & Long, J.D. (2004). Part of the solution and part of the problem: The role of peers in bullying, dominance, and victimization during the transition from primary school through secondary school. In D.E. Espelage & S.M. Swearer (Eds.) *Bullying in American schools: A socio-ecological perspective on prevention and intervention (pp. 107-117).* Mahwah, NJ: Lawrence Erlbaum Associates, Inc. Publishers.

Rigby, K. (2001). *Stop the bullying: A handbook for schools*. Victoria, Australia: Australian Council for Educational Research Ltd.

Rivers, I., & Smith, P.K. (1994). Types of bullying behavior and their correlates. *Aggressive Behavior, 20,* 359-368.

Sanchez, E., Robertson, T.R., Lewis, C.M., Rosenbluth, B., Bohmna, T., & Casey, D.M. (2001). Preventing bullying and sexual harassment in elementary schools: The expect respect model. *Journal of Emotional Abuse, 2*(2/3). 157-180

Sanchez, L. (2009, May 6). Protecting victims, preserving freedoms. Blog post to http://www.huffingtonpost.com/rep-linda-sanchez/protecting-victims-preser_b_198079.html?view=print

Schmidt, W.C. (1997). World-wide web survey research: Benefits, potential problems, and solutions. *Behavior Research Methods, Instruments & Computers, 29*(2), 274-279.

Schmidt, N. (2001). What a difference a discipline makes: Bullying research and future

directions. *Journal of Emotional Abuse, 2*(2/3), 1-5.

Seiter, E. (2007). *The internet playground: Children's access, entertainment and mis-education.* New York, NY: Peter Lang Publishing.

Shariff, S. (Spring, 2004). Keeping schools out of court: Legally defensible models of leadership. *The Educational Forum, 68*(3), 222-233.

Shariff, S., & Gouin, R. (2005). CYBER-DILEMMAS: Gendered hierarchies, free expression and cyber-safety in schools. Paper presented at *Oxford Internet Institute, Oxford University, U.K. International Conference on Cyber-Safety*. Paper available at www.oii.ox.ac.uk/cybersafety

Shariff, S., & Hoff, D.L. (2007). Cyber bullying: Clarifying legal boundaries for school supervision in cyberspace. *International Journal of Cyber Criminology, 1*(1), 76-118.

Shellenbarger, S. (2008, December 17). Cyber bully alert: Web sites make it easier to flag trouble. *The Wall Street Journal*, D1.

Smith, M.A., & Leigh, B. (1997). Virtual subjects: Using the Internet as an alternative sources of subjects and research environment. *Behavior Research Methods, Instruments and Computers 29*(4), 496-505.

Smith, P.K., Cowie, H., Olafsson, R.F., & Liefooghe, A.P.D. (July/Aug 2002). Definitions of bullying: A comparison of terms used, and age and gender differences, in a fourteen country international comparison. *Child Development, 73*(4), 1119-1133.

Solov, D.J. (2007). *The future of reputation: Gossip, rumor, and privacy on the Internet*. New Haven, CT: Yale University Press.

Stein, N. (2001). What a difference a discipline makes: Bullying research and future directions. *Journal of Emotional Abuse, 2*(2/3), 1-5.

Surdin, A. (2009, January 13). In several states, a push to stem cyber-bullying. *The Washington Post*, A03.

Swearer, S.M. & Doll, B. (2001). Bullying in schools: An ecological framework. *Journal of Emotional Abuse, 2*(2/3), 7-23.

Swearer, S.M. & Holt, M.K. (2001). Bullying and victimization during early adolescence: Peer influences and psychological correlates. *Journal of Emotional Abuse, 2*(2/3), 123-142.

Swearer, S.M., Song, S.Y., Cary, P.T., Eagle, J.M., & Mickelson, W.T. (2001). Psychosocial correlates in bullying and victimization: The relationship between depression, anxiety, and bully/victim status. *Journal of Emotional Abuse, 2*(2). 95-121.

Tarshis, T.P., & Huffman, L.C. (Apr 2007). Psychometric properties of the peer interactions in primary schools (PIPS) questionnaire. *Journal of Development & Behavioral Pediatrics, (28)*2, 125-132.

Thomsen, K. (2002). *Building resilient students: Integrating resiliency into what you already know and do*. Thousand Oaks, CA: Corwin Press.

Tinker v. Des Moines Independent Community School Dist., 393 U.S. 503 (1969).

Walker, H.M. (2010). Relational aggression in schools: Implications for future research on screening intervention and preventions. *School Psychological Review, 39*(4), 594-600.

Wang, J., Iannotti, R.J., & Nansel, T.R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational and cyber. *Journal of Adolescent Health, 43,* 1-8.

Willard, N.E. (2007). The authority and responsibility of school officials in responding to cyber bullying. *Journal of Adolescent Health, 41*(6, Suppl), S64-S65.

Willard, N.E. (2007). *Educator's guide to cyber bullying and cyberthreats.* Retrieved

August 29, 2013 from http://cyberbulling.org

Williams, K.R., & Guerra, M.G. (2007). Prevalence and predictors of internet bullying. *Journal of Adolescent Health, 41*(6, Suppl.), S14-S21.

Winchester, D. (2009, March 2). *Schools update for new breed of bully*. Retrieved March 5, 2009 from http://tampabay.com/news/education/k12/article980638.ece

Wolak, J., Mitchell, K.J., & Finkelhor, D. (2007). Does online harassment constitute bullying? An exploration of online harassment by known peers and online-only contacts. *Journal of Adolescent Health, 41*(6, Suppl.), S51-S58.

Worthen, M.R. (2007). Education policy implications from the expert panel on electronic media and youth violence. *Journal of Adolescent Health, 41*(6, Suppl), S61-S63.

Vaillancourt, T., McDougall, P, Hymel, S., Krygsman, A., Miller, J., Stiver, K., & Davis, C. (2008). Bullying: Are researchers and children/youth talking about the same thing? *International Journal of Behavioral Development, 32*(6), 502-511.

Vanderbosch, H., & Van Cleemput, K. (2008). Defining cyber bullying: A qualitative research into the perception of youngsters. *CyberPsychology & Behavior, 11*(4), 499-503.

Vossekuil, B., Fein, R.A., Reddy, M., Borum, R., & Modzeleski, W. (2002). *The final report and findings of the safe school initiative: implications for the prevention of school attacks in the United States.* Washington, DC: United States Secret Service and United States Department of Education.

Ybarra, M.L. (2004). Linkages between depressive symptomology and Internet harassment among young regular Internet users. *CyberPsychology & Behavior, 7*(2), 247-257.

Ybarra, M.L., Diener-West, M., & Leaf, P.J. (2007). Examining the overlap in internet harassment and school bullying: Implications for school intervention. *Journal of*

Adolescent Health, 41(6, Suppl), S42-50.

Zirkel, P. (Ed.). (2008). Action in Teacher Education, 30(2).

APPENDIX A

STATE ANTI BULLYING STATUTES INCLUDING CYBER BULLYING DESCRIPTORS

1. Arkansas – ARK. CODE. ANN. § 6-18-514 (2008) and 6-18-1005 [2003 & 2007]

2. California – CA. EDUC. CODE § § 32261, 32265(b)(9), 32270, 35294.21 and 48900 [2003 & 2008]; 35294.2 [1989]; see also §§ 32285, 32287 and 32288 [2003]

3. Delaware – DEL. CODE ANN. 14 §§ 4112D and 4123A [2007]

4. Florida – FLA. STAT. ANN. 1003.4205 and 1006.147 [2008]

5. Illinois – 105 ILL. COMP. STAT. 5/10-20.14(d) [2001]; 5/27-23.7 [2006 & 2007]; and 5/27-13.3 [2008]

6. Indiana – IND. CODE ANN. 016 §§ 5-2-10.1-2; 5-2-10.1-11; 5-2-10.1-12; 20-8.1-5.1-0.2; 20-8.1-5.1-7.7; 20-33-8-0.2; and 20-33-8-13.5 [2005]

7. Iowa – IOWA CODE §§ 280.12 and 280.28 [2007]

8. Kansas – KAN. STAT. ANN. § 72-8256 [2007 & 2008]

9. Maryland – MD. CODE ANN. EDUC. § 7-424 [2006, 2007 & 2008]

10. Massachusetts - MASS. ANN. LAWS § 265.43a [2009]

11. Minnesota - MINN. STAT. ANN. § 121A.0695(28) [2005 & 2007]

12. Nebraska – NEB. REV. STAT. ANN § 79-267 [2008]

13. New Jersey – NJ. STAT. ANN. §§ 18A:37-13 TO 37.17 [2002 & 2007]

14. New York – N.Y. EDUC. LAW § 2801.a [2000] and § 814 [2008]

15. Oklahoma – OKLA. STAT. tit. 70 §§ 24-100.2 TO 24.100.5 [2002 & 2008]

16. Oregon – OR. REV. STAT. §§ 339.351 TO 339.364 [2001, 2005 & 2007]

17. Rhode Island – R.I. GEN. LAWS §§ 16-21-24 [2001, as amended] and 16-21-26 [2003 & 2006]

18. Texas – TEX. EDUC.CODE ANN. §§ 25.0341, 37.001 and 37.083 [2005 & 2007]

19. Virginia – VA. CODE. ANN. § 18.2-157.7:1 and 18.2-372 [2006 & 2008]

20. Vermont – VT. STAT. ANN.tit. 16 §§ 140A, 165 and 565 [1999]; 16 §§ 11 and 1161 [2004]; tit. 33 § 4917 [2008]

21. Washington – WASH. REV. CODE §§ 28A.300.285 and 28A600.480 [2002 & 2007]

APPENDIX B

CYBER BULLYING KNOWLEDGE SURVEY

Welcome to the Cyber bullying Knowledge Survey (CBKS)

The CBKS is designed to measure the perceptions and knowledge of educators about the cyber bullying phenomenon.

The CBKS asks respondents to reflect on what they think cyber bullying is, how cyber bullying happens, and to whom it happens. The survey should take approximately 15 minutes to complete.

All responses to the survey will remain anonymous. Data collected from survey responses will be analyzed and reported in an aggregate format. No single response will be examined or reported individually.

This survey is completely voluntary and you may quit at any time. You can exit the survey before submitting your responses. You must be 18 years of age to participate in this survey

I have read and understand the information outlined above and agree to participate in this survey.*

- o Yes
- o No

Section I. Demographics

Please identify your gender:

- Male
- Female

Please select your age:

- 18-24
- 25-34
- 35-54
- 55+

Please identify your race/ethnicity:

- Asian/Pacific Islander
- Black/African-American
- Caucasian
- Hispanic
- Native American/Alaska Native
- Other/Multi-Racial
- Decline to Respond

Please identify the state in which you work or attend classes.*

- Alabama
- Alaska
- American Samoa
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Delaware
- District of Columbia
- Federated States of Micronesia
- Florida
- Georgia

- Guam
- Hawaii
- Idaho
- Illinois
- Indiana
- Iowa
- Kansas
- Kentucky
- Louisiana
- Maine
- Marshall Islands
- Maryland
- Massachusetts
- Michigan
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Hampshire
- New Jersey
- New Mexico
- New York
- North Carolina
- North Dakota
- Northern Mariana Islands
- Ohio
- Oklahoma
- Oregon
- Palau
- Pennsylvania
- Puerto Rico

- Rhode Island
- South Carolina
- South Dakota
- Tennessee
- Texas
- Utah
- Vermont
- Virgin Islands
- Virginia
- Washington
- West Virginia
- Wisconsin
- Wyoming

Please select from the options below the type of locale that best describes where you work or attend classes.

- Urban
- Suburban
- Rural

How many years have you worked in education?

- 1 to 5 years
- 6 to 10 years
- 11 to 15 years
- 16 to 20 years
- 20+ years

Please define your role in education (position/title):*

- Teacher (pre service on in service)
- Administrator (School Principal, district-level staff, etc.)
- Student Services Professional (School Psychologist, School Counselor, etc.)
- State Education Agency Professional
- Attorney involved in School Law
- Public Safety Personnel

- Higher Education Faculty
- Graduate Student in Educational Studies (School Admin, Counseling, etc.)
- Parent
- None of the Above

Section II: Cyber bullying Laws

For the purpose of this research study, cyber bullying is defined as: *"an intentional, severe, and/or repeated act which systematically and chronically inflicts distress on an individual, or group of individuals, through the use of technology-enabled devices."*

1) Does your state have any anti-cyber bullying laws?

- Yes
- No

CBKS - Instructions

The following 3 sets of questions pertain to acts of cyber bullying. The question sets ask you to provide your personal opinions about:

- How cyber bullying can happen, i.e., what kinds of devices can spread acts of cyber bullying;
- Who could be a potential victim of cyber bullying; and
- Why does cyber bullying happen?

Current research into existing state legislation(s) define cyber bullying as: "an intentional, severe and/or repeasted act which systematically and chronically inflicts distress on an individual, or groups of individuals, through the use of technology-enabled devices.

Section III. Cyber bullying Devices

The questions in this section pertain to *devices* used to cyber bully.

In part one (1) of each question, please indicate if you believe the identified *device* might be (YES) or might not be (NO) a device used to cyber bully.

In part two (2), please indicate your certainty that current state anti-cyber bullying laws include the identified item when describing *devices* used to cyber bully.

State laws identify cell phones as devices used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify telephones as devices used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify pagers as devices used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure

- Sure
- Unsure
- Absolutely Unsure

State laws identify text messaging as a device used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify instant messaging as a device that is used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify email as a device that is used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure

- Absolutely Unsure

State laws identify Web sites or blogs as devices that are used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify social networking sites (e.g., MySpace, Facebook) as devices that are used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify microblogging sites (i.e., Twitter, Tumblr, whatyadoin.com) as devices that are used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure

- Absolutely Unsure

State laws identify Viral Video sites (i.e., YouTube) as devices that are used to cyber bully.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

If there is a technology enabled device or system that you believe is missing from this list, please list here:

Section IV. Cyber bullying Targets

The questions in the next section pertain to *potential targets* of cyber bullying.

In part one (1) of each question, please indicate if you believe each identified group might be (YES) or might not be (NO) a *potential target* of cyber bullying.

In part two (2), please indicate your certainty that current state anti-cyber bullying laws include the identified group when describing *potential targets* of cyber bullying.

State laws identify students as potential targets of cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify teachers (including sports coaches) as potential targets of cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify principals and school administrators as potential targets of cyber bullying.

- Yes

- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify student services personnel (school counselor, school psychologist, etc.) as potential targets of cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify school staff (front office personnel, bus drivers, janitors, etc.) as potential targets of cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify school volunteers as potential targets of cyber bullying.

- Yes

- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify parents as potential targets of cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

If there is a group that you believe is missing from this list, please list here:

Section V. Cyber bullying Motivations

The questions in the next section pertain to the *motivations* for cyber bullying.

In part one (1) of each question, please indicate if you believe each identified *motivation* might be (YES) or might not be (NO) a reason for cyber bullying.

In part two (2), please indicate your certainty that current state anti-cyber bullying laws includes the identified *motivation* when describing cyber bullying.

State laws identify intimidation as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify ridicule or humiliation as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify personal degradation or dehumanization as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify social exclusion of others as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify discrimination as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify harassment as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure

- Sure
- Unsure
- Absolutely Unsure

State laws identify disruption of learning as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify disruption of school-sponsored activities as motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

State laws identify no real reason or motivation for cyber bullying.

- Yes
- No

How certain are you of your response?

- Absolutely Sure
- Sure
- Unsure
- Absolutely Unsure

If there is a motivation that you believe is missing from this list, please list here:

Section VI. Cyber bullying Offenses & Punishments

The state of Massachusetts recently enacted a law that considers acts of cyber bullying to be punishable offenses, with consequences of up to 2.5 years in jail and fines up to $1,000 if convicted.

Do you agree that cyber bullying should be a punishable offense?

- Yes
- No

If no, please explain.

Why do you believe cyber bullying <u>should not</u> be considered a punishable offense? Please explain.

CBKS - Offenses & Punishments

Only states legislators and the Federal Government can create laws.

Of the following groups, please identify the most important group you believe should be assisting law makers in the process of defining cyber bullying for the purpose of influencing future anti cyber bullying policies (developed at the LEA, school board, state and/or Federal level.)

- U.S. Federal Government
- State Legislative Bodies
- State, System or District Boards of Education
- Individual School Principals and/or Administrators
- Parent-Teacher Organizations

Section VII. Perceptions and Incidences

Current research and existing state legislation define cyber bullying as: *"an intentional, severe, and/or repeated act which systematically and chronically inflicts distress on an individual, or group of individuals, through the use of technology-enabled devices."*

Do you agree with this definition of cyber bullying?

- Yes, it aligns with my personal perception of cyber bullying.
- No. I think cyber bullying is something different.

How concerned are you about cyber bullying in your school or place of work?

- Very concerned
- Concerned
- Not concerned
- Not at all concerned
- No response due to no experience with cyber bullying

Which do you think happens more often?

- Face-to-face bullying
- Cyber bullying
- No opinion due to no experience with cyber bullying

How frequently do you think students in your school are cyber bullied?

- Frequently
- Occasionally
- Never
- Don't Know

Where is cyber bullying happening in your school?

- On school computers
- On cell phones
- On personal (i.e., home) computers outside of school

- On social networking sites (Facebook, MySpace, etc.)
- On blog posts or other Web sites
- On microblogging Web sites (i.e., Twitter, etc.)
- Online hate group Web sites
- Online gang Web sites
- On other digital devices. Please explain below.
- Not happening

If you specified <u>other digital devices</u> in the previous question, please describe those devices:

How inclined are your students to report incidences of cyber bullying?

- Always
- Frequently
- Sometimes
- Never

Are your school leaders adequately prepared to respond to student (or parent) reports of cyber bullying?

- Very Prepared
- Prepared
- Unprepared
- Not Prepared at all
- No opinion - Do not work in a school

How could teachers and administrators be better prepared to deal with cyber bullying?

Thank you for completing the Cyber bullying Knowledge Survey!

The goal of this survey, and its associated research, is to establish the foundation for an operational definition of cyber bullying that can be agreed upon by all education stakeholders responsible for creating anti-cyber bullying laws and local (state, school system/LEA) policy.

The ultimate goal of this research is to inform policy makers about the realities of this destructive trend of online behaviors and potentially drive development of future anti-cyber bullying policy and legislation.

If you interested in the survey results and/or my dissertation, please feel free to click here and I will add your name to a distribution list. Email addresses received by researchers are not be associated with individual participant responses and will not be used for any purpose, other than to provide information regarding the results of this research study.

Thanks again,

Amy H. Glass
aglass@jhu.edu

APPENDIX C

IRB APPROVAL LETTER

JOHNS HOPKINS
UNIVERSITY

Homewood Institutional Review Board
3400 N. Charles Street - Whitehead 101
Baltimore MD 21218-2685
410-516-6580 _ http://web.jhu.edu/Homewood-IRB/

Michael McCloskey
Chair

July 22, 2011

Deborah Carran EdD
Amy Glass, student researcher
Teacher Development & Leadership
School of Education
6740 Alexander Bell Dr, Suite 180
Columbia MD 21046

Re: HIRB No. 2011061 / **Exposing the Gap: An Examination of Educators' Perceived Knowledge About Cyber Bullying**

In accordance with Federal regulations for the protection of human research subjects, 45CFR46.101(b), this research qualifies as **exempt** from further IRB review under exempt category No. 2.

No further communications with the IRB are necessary **unless the procedures in your project are changed in such a manner as to void the basis of the exemption**, in which case IRB-approval must be obtained prior to implementation of the change.

Please keep a copy of this letter for future reference. Thank you for contacting the Homewood IRB about this research and for providing the requested information to make this determination. Your cooperation is greatly appreciated.

If you have any questions, please do not hesitate to contact the HIRB at (410) 516-6580 or HIRB@jhu.edu.

Homewood IRB

cc: Research Administration

Funded by: None /

APPROVAL IS GRANTED UNDER THE TERMS OF **FWA00005834** FEDERAL-WIDE ASSURANCE OF COMPLIANCE WITH DHHS REGULATIONS FOR PROTECTION OF HUMAN RESEARCH SUBJECTS

APPENDIX D

CURRICULUM VITAE

AMY H. GLASS

12919 Victoria Heights Dr.
Bowie, MD 20715 aglass@jhu.edu

PROFILE

Doctoral candidate with a passion for complex education issues, including school law, education policy analysis and preparing educators to deal with the diverse learning needs of students of all ages. Researcher and writer adept at conducting research and performing both quantitative and qualitative statistical analysis, with ability in communicating complex issues and information to a diversity of audiences. Professional development trainer with excellent time management, planning and presentation skills and extensive experience working with educators to integrate technology into a variety of learning experiences. Online course administrator experienced in creating and maintaining student registration/tracking system, developing and administering course assessments for online courses and developing online course materials.

EDUCATION

Doctoral Candidate, Teacher Development and Leadership Anticipated: Spring 2014
Dissertation Topic: Examining Educators' Perceptions about Cyber bullying
Johns Hopkins University, Baltimore, MD

Masters of Science, Technology for Educators **May 2003**
Johns Hopkins University, Baltimore, MD

Bachelor of Arts, History **December 1993**
University of Maryland, College Park, MD

PROFESSIONAL EXPERIENCE

Bowie State University, Bowie, MD
PRAXIS Lab Coordinator May 2008 to present
Responsibilities include:

- Daily management of the PRAXIS Lab, including working with students to improve their technology skills; ensuring the proper functioning of 20 PCs (on the BSU network; supporting and maintaining proper working order of complex audio visual equipment; and, providing general maintenance and support for all other Lab equipment.
- Overseeing all facets of educational technology management for the College of Education (CoE), including conducting regular physical inventories of all electronic equipment in the College in order to maintain accurate inventory records, as required by BSU Asset Management.
- Statistical testing and data analysis of PRAXIS testing data received by the CoE. Also responsible for providing analysis results in a variety of formats accessible to all CoE faculty
- Performing research and analysis of current trends in educational technology, as requested by the Dean of the College of Education.

- Responsible for layout and creation of the College of Education Newsletter, printed and distributed once per semester. Also responsible for all maintenance of College of Education Web site content.

American Association of Colleges for Teacher Education (AACTE), Washington, DC

Program Associate for Technology August 2003 to August 2004

Responsibilities included:

- Research and analysis of emerging issues in educational technology, education policy and grant funding opportunities
- Logistic planning and management of activities at biannual meetings and national events for the Committee on Technology in Teacher Education
- Grant management of the AACTE/Microsoft Innovative Teachers grant

Center for Technology in Education, The Johns Hopkins University, Baltimore, MD

Training Facilitator December 2002 to July 2003

Responsibilities included:

- Organization and facilitation of online and instructor-led training sessions
- Statistical analysis of usage data for CTE's online tools suite
- Technical support for Blackboard learning system, for JHU School of Education faculty, staff and students
- Course material and basic Web site development

Training Assistant August 1999 to November 2002

Responsibilities included:

- Research, competitive intelligence and literature review development on topics of interest to CTE
- Online and telephone technical support for CTE's online tools suite and U.S. Department of Education online reporting tool
- Logistical planning and support for local and national meetings
- Administrative support for online and instructor-led trainings

OTHER PROFESSIONAL EXPERIENCE

Teaching

- Fall 2010 through present: Guest lecturer for undergraduate pre service teachers in the areas of conducting and reporting action research projects and completing of professional portfolios.
- Fall 2008: Adjunct faculty at Johns Hopkins University in Columbia, MD. Taught doctoral course: Statistics I with SPSS.
- Summer and fall 2006: Adjunct Faculty at National University in La Jolla, CA. Taught three (3) online Graduate courses in Technology Integration into K12 Learning Environments.
- Fall 2002 and spring 2003: Supervised three (3) graduate student internships in the Technology for Educators program.

- Fall 2002 and spring 2003: Guest lecturer in Graduate courses on Educational Assessment and Evaluation.
- Development of two (2) online courses for delivery to Maryland educators for continuing education credit. Topics included a self-paced course on *Obtaining Copyright Permissions for Online Course Materials* and an online course entitled *Maximizing the Capacity of the Web for Effective Research*

Data Analysis and Program Evaluation

- Fall 2012 – Data entry and preliminary analysis of survey response data for faculty research project in the College of Education at Bowie State University.
- Fall 2012 – Data entry, analysis and analysis write up for faculty research project in the Department of Communications at Bowie State University
- Spring 2010 - Data analysis and auditing for the PUEO project at the Center for Summer Learning, a grant project with The Johns Hopkins University.
- Spring 2010 - Data Analysis and auditing for the Council on Quality and Leadership, a grant project with The Johns Hopkins University.
- Summer 2010 - Program evaluation for the Project GearUp grant in the College of Education at Bowie State University.
- March 2008 through October 2009 – Individual file auditing and preliminary data analysis performed for the Special Master to the Court, Ms. Amy Totenberg, in resolution of the case: Blackman-Jones v. District of Columbia. 581 F. Supp. 2nd 2, 238 Ed. Law Rep. 746.

- Functional/Conversational literacy in Spanish

TECHNICAL EXPERIENCE

Extensive working knowledge of:

- Android tablets, PC based Laptops, LCD Projectors, Printers, Fax machines, USB drives, portable hard drives, overhead projecters, SmartBoards and various other electronic teaching and learning tools
- Productivity Tools (Microsoft Office 2003 Suite, email applications, etc.)
- Statistical Package for Social Sciences (SPSS 19.0)
- Online Course Management and Delivery Systems (Blackboard, WebCT, rCampus. etc.)
- Web Survey and Data Analysis Tools (Websurveyor, surveymonkey.com, etc.)
- Web Development Applications and Tools (DreamWeaver, FrontPage, Photoshop, etc.)

Strong working knowledge of Apple hardware and software, and presentation equipment

PRESENTATIONS AND PAPERS

Glass, A. & Williams, O. (2013). "Introduction to Research Methodology for the Social Sciences." A presentation made at the Bowie State University's Spring Faculty Institute, January 2013.

Glass, A. & Nutter, D. (2012). "Introduction to Research Methodology for the Social Sciences." A presentation made at the Bowie State University's Spring Faculty Institute, January 2012.

Glass, A. (2011). "Technology-Enabled Bullying, Harassment & Threats." A presentation made at the Bowie State University's Faculty Development Institute, August 2011.

Glass, A. (2009). "U.S. Supreme Court Influence on Cyber bullying Policy." A presentation made at ASCD's 2009 Annual Conference and Exhibit Show, March 2009.

Glass, A. (2005). "Technology-Enabled Bullying, Harassment & Threats." A presentation made at the annual conference of Maryland Instructional Computer Coordinators Association (MICCA), April 2005.

Glass, A. (2005). "Captology: Teaching and Learning with Persuasive Technology." A presentation made at the Society for Applied Technology's New Learning Technologies Conference, February 2005.

Masullo, M., Glass, A., Tsantis, L., (2007). "Competency-Based Training + Agile Learning = 100% Mastery." A presentation made at the Society for Applied Learning Technology's Interactive Technologies Conference, August 2007.

Stellman, L. & Glass, A., (2004). "Technology-Enabled Bullying, Harassment & Threats." A presentation made to the Maryland Association of Boards of Education. December 2004.

Tsantis, L., Glass, A., Thouvenelle, S., & Keefe, D. (2004). "Captology: Teaching, Learning and Leading with Persuasive Technology." A paper presented at the Athens Institute for Education and Research's Sixth Annual Conference on Education, Athens, Greece. May 2004.

REFERENCES

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